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THE ESTIMATED COST FOR THIS REQUEST IS 542.36 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:v

L8 ANSWER 1 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2011:142123 CAPLUS

DOCUMENT NUMBER: 154:170452

TITLE: Organic electroluminescent element

INVENTOR(S): Ise, Toshihiro; Kitamura, Tetsu; Watanabe, Toru;

Takeda, Akira; Tonosaki, Keiju PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

PATENT ASSIGNEE(S): Fujifilm Corporation, Japa SOURCE: PCT Int. Appl., 128pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	PAT	ENT :	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D	ATE	
							-											
	WO	2011	0137	83		A1		2011	0203		WO 2	010-	JP62	859		2	0100	729
		W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
			CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
			ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
			KG,	KM,	KN,	KΡ,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
			ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PE,	PG,
			PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
			TH,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	z_W
		RW:	AL,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,
			HU,	ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,
			SI,	SK,	SM,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,
			NE,					GH,								SD,	SL,	SZ,
			TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	ΒY,									
PRIOR	RITY	APP.	LN.	INFO	. :						JP 2	009-	1802	23	1	A 2	0090	731
											JP 2	009-	2011	55		A 2	0090	831
											JP 2	009-	2216	63		A 2	0090	925

AB Disclosed is an organic electroluminescent element having excellent light emission characteristics and excellent durability, wherein chromaticity change is suppressed when the organic electroluminescent element is driven at high temps. The organic electroluminescent element comprises, on a substrate, a pair of electrodes and a light-emitting layer arranged between the electrodes, and was characterized in that the light-emitting layer contains a compound (Cz)p-L-(A)q [Cz = (un)substituted arylcarbazolyl or carbazolylaryl; L = single bond, (un)substituted arylene, cycloalkylene or aromatic heterocycle; A = (un)substituted N-containing six-membered aromatic heterocycle; p, q = integer of 1-6] and a specific metal complex.

IT 881887-26-9 881887-28-1 RL: TBM (Technical or engineered material use); USES (Uses) (organic electroluminescent element)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-28-1 CAPLUS

CN Platinum, [[2,2'-(1-methylethylidene)bis[6-[3-(trifluoromethyl)phenyl]pyridinato]](2-)]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2011:142036 CAPLUS

DOCUMENT NUMBER: 154:220813

TITLE: Organic electroluminescent element and method for

manufacturing same

INVENTOR(S): Masui, Kensuke; Sugiyama, Takeo; Kawato, Koji

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 53pp.
CODEN: PIXXD2

Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

DOCUMENT TYPE:

PATEN	PATENT NO.			KIN	D	DATE		APPLICATION NO.						DATE			
						-											
WO 20	0110:	1362	28		A1		2011	0203	1	WO 2	010-	JP62	541		2	0100	726
Ţ	V: 2	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
	(CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
	1	ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
	1	KG,	KM,	KN,	KΡ,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
	1	ΜE,	MG,	MK,	MN,	MW,	MX,	MY,	ΜZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PE,	PG,
	I	PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
		TΗ,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	zw
E	RW: 2	AL.	AT.	BE.	BG.	CH.	CY.	CZ.	DE.	DK.	EE.	ES.	FI.	FR.	GB.	GR.	HR.

HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LR, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

JP 4598137 B1 20101215 JP 2009-180204 20090731 JP 2011035172 A 20110217 PRIORITY APPLN. INFO:: JP 2009-180204 A 20090731

Disclosed is an organic electroluminescent element which was characterized by comprising a light-emitting layer that has a Raman peak within the range of 800 - 1,283 cm-1. The organic electroluminescent element is also characterized in that the wavenumber difference between the maximum Raman peak of the light-emitting layer as determined as a layer and the Raman peak of the material that forms the light-emitting layer as determined as a crystal is 2 cm-1 at the maximum

1256953-03-3

RL: TEM (Technical or engineered material use); USES (Uses)
(organic electroluminescent element and method for manufacturing same)

RN 1256953-03-3 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-3,5-difluoro-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2011:142025 CAPLUS

DOCUMENT NUMBER: 154:220812

TITLE: Vapor deposition material for organic device and

method for manufacturing organic device

INVENTOR(S): Hayashi, Masayuki

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 48pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE		
						-												
WO	2011	0136	26		A1		2011	0203		WO 2	010-	JP62	538		2	0100	726	
	W:	AE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	
		ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	

KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM JP 2009-179957

PRIORITY APPLN. INFO.: JP 2009-219311 A 20090924

Disclosed is a vapor deposition material which is used for the production of AB an organic device. The vapor deposition material for an organic device has an average particle diameter expressed as D50% of 10-200 µm and a uniformity degree expressed as D60% diameter/D10% diameter of 1.0-4.0.

881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (vapor deposition material for organic device)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)(4-cyano-2,1phenylene-kC1)||-, (SP-4-2)- (CA INDEX NAME)

REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

7 ANSWER 4 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2011:139719 CAPLUS

DOCUMENT NUMBER: 154:170449

TITLE: Organic electroluminescent element

INVENTOR(S): Kitamura, Tetsu; Watanabe, Toru; Havashi, Masavuki;

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS

Ise, Toshihiro

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan PCT Int. Appl., 121pp. SOURCE:

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2011013830 A1 20110203 WO 2010-JP62961 20100730 W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TM, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW, RN: AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, FE, SI, TI, TI, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, EW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, CM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO::

JP 2009-180222 A 20090731
A 20090831

GI

$$L^{2} \xrightarrow{Q^{1}} Pt \qquad L^{3}$$

$$Q^{3} \qquad Q^{4} \qquad I$$

AB Disclosed is an organic electroluminescent element which is able to be driven at low voltage and exhibits high efficiency and excellent durability, while having small chromaticity change when driven at high temps. The organic electroluminescent element comprises, on a substrate, a pair of electrodes and at least one organic layer arranged between the electrodes and including a light-emitting layer, and was characterized in that one organic layer contains a compound (C2)p-L-(A)q [Cz = (un) substituted arylenzacılyl or carbazolylaryl; L = single bond, (un) substituted arylene, cycloalkylene or aromatic heterocycle; A = (un) substituted N-containing six-membered aromatic heterocycle; P, q = integer of 1 - 6.] and the light-emitting layer contains a phosphorescent material I [01-4 = ligand coordinated to Pt; L1-3 = single bond or divalent linking group].

IT 881887-26-9 1227925-61-2 1234267-56-1 RE: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent element)

RN 881887-26-9 CAPLUS

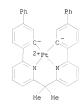
CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1227925-61-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)[1,1'-biphenyl]-3,4-diyl-κC4]]-, (SP-4-2)- (CA INDEX NAME)

1234267-56-1 CAPLUS RN

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)[1,1'biphenyl]-4,3-diyl-xC3]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT:

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2011:100519 CAPLUS

DOCUMENT NUMBER: 154:196969

TITLE: Organic electroluminescence components

INVENTOR(S): Masui, Kensuke; Toyama, Wataru

Fuji Photo Film Co., Ltd., Japan PATENT ASSIGNEE(S):

SOURCE: Jpn. Tokkyo Koho, 49pp.

CODEN: JTXXFF DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 4620802	В1	20110126	JP 2010-181403	20100813
PRIORITY APPLN. INFO.:			JP 2010-9813 A	20100120

AB The title organic electroluminescence component comprises a 1st/2nd/3rd organic laminate bound between an anode and a cathode, wherein (1) the 1st organic layer contains 10-90 weight% 1st host material and 10-90 weight% 1st hole transport phosphorescent material and (2) the 2nd organic layer contains 65-96.9 weight% 2nd host material, 3-30 weight% 2nd hole transport phosphorescent material, and 0.1-5 weight% electron trap material. The 2nd host material, 2nd hole transport phosphorescent material, and the

electron trap material have relationships indicated below; IRMOMC219. IMMOMC219. IMMOMC219. IMMOMC219. IMMOMC219. IMMOMC219. IMMOMC219. IMMOMC219. DESEV-LLUMDC219. and ILUMDOC219. 25eV-LLUMDC219. wherein HOMOMC2 denotes the HOMO energy level of electron trap material in the 2nd organic layer, HOMOMC2 denotes the HOMO energy level of the 2nd host material, HOMOMC2 denotes the HOMO energy level in the 2nd host material, HOMOMC2 denotes the LUMO energy level in the electron trap material in the 2nd organic layer, and LUMOMC2 denotes the LUMO energy level in the electron trap material in the 2nd organic layer, and LUMOMC2 denotes the LUMO energy level in the 2nd host material.

phosphorescent material. The total average thickness of the 1st and 2nd organic

layers is ≥ 40 nm. The 3rd organic layer contains a hole block material having a triple term excitation level which is higher that in the 2nd hole transport phosphorescent material by 0.1 eV. The arrangement gives organic electroluminescent components simultaneous fulfillment of excellent durability, luminescent efficiency, and current-caused chromaticity deterioration prevention at decreased radiation position deviation.

IT 881887-26-9 1229620-10-3

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(electron trap layer; organic electroluminescence components)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN))(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1229620-10-3 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

DOCUMENT NUMBER:

TITLE . INVENTOR(S):

154:110158

Phosphorescent platinum complexes, their monomers and copolymers, and uses in organic electronic devices Feng, Ke; Zhang, Yadong; Barlow, Stephen; Kim, Dongwook; Marder, Seth R.; Bredas, Jean-Luc; Weck, Marcus; Kippelen, Bernard; Kim, Sung-Jin

PATENT ASSIGNEE(S): Georgia Tech Research Corporation, USA; Solvav SA SOURCE: PCT Int. Appl., 78pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.				KIN	D	DATE			APPLICATION NO.					DATE			
WO	2011				A1	-	20110106			WO 2								
	W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	ΒZ,	
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	
		ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	
		KE,	KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	
		MD,	ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PE,	
		PG,	PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	
		SY,	TH,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	Z
	RW:	AL,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	
		HU,	ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	
		SI,	SK,	SM,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	
		NE,	SN,	TD,	TG,	BW,	GH,	GM,	KE,	LR,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	
		TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM				
TTY	APP	LN.	INFO	. :						US 2	009-	2222	75P	1	2	0090	701	

AB The inventions disclosed and described herein relate to phosphorescent platinum complexes that can be optionally substituted and/or optionally bonded to polymerizable groups, including styrene, acrylate, or norbornene groups, the phosphorescent polynorbornene copolymers made therefrom, and electronic devices comprising the platinum complexes and their copolymers, including organic light emitting diodes. Methods of making the Platinum

complexes and the related copolymers and/or devices are also described. 1187677-42-4P 1187677-47-9P 1187677-48-0P 1187677-51-5P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (phosphorescent platinum complexes, their monomers and copolymers, and

uses in organic electronic devices)

RN 1187677-42-4 CAPLUS CN

Platinum, [(1-methoxyethylidene)bis[(2,6-pyridinediyl-kN)(4,6difluoro-1,2-phenylene-kC)||-, (SP-4-2)- (CA INDEX NAME)

- RN 1187677-47-9 CAPLUS
- CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-methoxyhexylidene)bis[(2,6-pyridinediyl-xN)] (4,6-difluoro-1,2-phenylene-xC)]]-, (SP-4-2)-(CA INDEX NAME)

- RN 1187677-48-0 CAPLUS
- CN Platinum, [(1-fluoroethylidene)bis[(2,6-pyridinediyl-KN)(4,6-difluoro-1,2-phenylene-KC)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1187677-51-5 CAPLUS

CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-fluorohexylidene)bis[(2,6-pyridinediyl-kN)(4,6-difluoro-1,2-phenylene-kC)]]-, (SP-4-2)-(CA INDEX NAME)

IT 1187677-52-6P 1187677-53-7P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(phosphorescent platinum complexes, their monomers and copolymers, and uses in organic electronic devices)

RN 1187677-52-6 CAPLUS

CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-methoxyhexylidene)bis[(2,6-pyridinediyl-kN)(4,6-difluoro-1,2-phenylene-kC)]]-, (SP-4-2)-, polymer with bicyclo[2.2.1]hept-5-en-2-ylmethyl 3,5-di-9H-carbazol-9-ylbenzoate (CA INDEX NAME)

CM

CRN 1187677-47-9 CMF C36 H32 F4 N2 O Pt

CCI CCS

10/578,039

CM 2

CRN 1167996-20-4 CMF C39 H30 N2 O2

RN 1187677-53-7 CAPLUS

Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-fluorohexylidene)bis[(2,6-pyridinediyl-kN)(4,6-difluoro-1,2-phenylene-kC)]]-, (SP-4-2)-, polymer with bicyclo[2.2.1]hept-5-en-2-ylmethyl 3,5-di-9H-carbazol-9-ylbenzoate (CA INDEX NAME)

CM 1

CN

CRN 1187677-51-5 CMF C35 H29 F5 N2 Pt CCI CCS

CM

CRN 1167996-20-4 CMF C39 H30 N2 O2

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 7 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN 2010:1631988 CAPLUS

6

ACCESSION NUMBER:

DOCUMENT NUMBER: 154:121124

TITLE: Organic electroluminescent devices using lenses to control the optical path of emitted light achieving

high light-extraction efficiency and reduced image

bleeding and design method of OLED INVENTOR(S):

Sonoda, Shinichiro; Takabashi, Toshiro; Tobise, Manabu PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: U.S. Pat. Appl. Publ., 31pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20100327304	A1	20101230	US 2010-826106	20100629
JP 2011029172	A	20110210	JP 2010-147753	20100629
IORITY APPLN. INFO.:			JP 2009-156351 F	20090630

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

Organic electroluminescent devices with high light-extraction efficiency and reduced image bleeding are described which comprise an organic electroluminescent display part which includes an anode, a cathode and at least a light-emitting layer disposed between them, and a lens which controls an optical path of light emitted from the light-emitting layer, where the organic electroluminescent device has a ratio of A to B (A/B) of greater than 1, where A denotes a light-extraction efficiency in terms of front brightness when the lens is placed on a surface from which the light is extracted, and B denotes a light-extraction efficiency in terms of front

brightness

when the lens is not placed on the surface from which the light is extracted, and where the organic electroluminescent device has a ratio of \$\phi\$ to a (ϕ/a) of 1.0 or greater, where a denotes the maximum length of a side of the light-emitting layer and ϕ denotes an effective diameter of the lens. 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses)

(in mixed light-emitting layer; organic electroluminescent devices using lenses to control optical path of emitted light achieving high light-extraction efficiency and reduced image bleeding and design method of OLED)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)(4-cyano-2,1phenylene-kC1)]]-, (SP-4-2)- (CA INDEX NAME)

ANSWER 8 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:1556265 CAPLUS

DOCUMENT NUMBER: 154:52794

TITLE: Production method of organic electroluminescent device

INVENTOR(S): Masui, Kensuke; Sugiyama, Takao; Kawato, Koji PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan SOURCE:

Jpn. Tokkyo Koho, 32pp. CODEN: JIXXFF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATE	PATENT NO.				KIN	D	DATE		APPLICATION NO.					DATE			
						-									-		
JP 4	598	137			B1		2010	1215		JP 2	009-	1802	04		2	0090	731
JP 2	2011	0351	72		A		2011	0217									
WO 2	011	0136	28		A1		2011	0203		WO 2	010-	JP62.	541		2	0100	726
	W:		AG,														
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
		ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
		KG,	KM,	KN,	KP,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PE,	PG,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
		TH,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW
	RW:	AL,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,
		HU,	IE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,
		SI,	SK,	SM,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,
		NE,	SN,	TD,	TG,	BW,	GH,	GM,	KE,	LR,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,
		TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM			
RITY	APP:	LN.	INFO	. :						JP 2	009-	1802	04	ì	A 2	0090	731

PRIOR AB

The invention refers to a production method of an organic electroluminescent device using vapor deposition, wherein the host material of the luminescent layer has a Raman peak at 1000.4 - 1283 cm-1, and the maximum and min. temperature of the quest material and substrate is within 2° spectra that the deposition peak difference between the host material in the luminescent layer and the host material in crystal form is ≤ 2

cm-1,. ΤТ 1256953-03-3

RL: TEM (Technical or engineered material use); USES (Uses) (production method of organic electroluminescent device) RN 1256953-03-3 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)(4-cyano-3,5difluoro-2,1-phenylene-kC1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 9 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:1531317 CAPLUS

DOCUMENT NUMBER: 154:38504

TITLE: Organic electroluminescent devices provided with polycarbazole compound charge blocking layer

INVENTOR(S): Kinoshita, Masaru; Masui, Kensuke

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 75pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.				KIND DATE			APPLICATION NO.					DATE		
WO 2010			A1	_	2010	1209									
W:	AE, A	AG, AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
	CA, C	CH, CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
	ES, E	FI, GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
	KG, F	KM, KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
	ME, N	MG, MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PE,	PG,
	PH, E	PL, PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
	TH, 1	IJ, TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW
RW:	AL, A	AT, BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,
	HU, I	IE, IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,
	SI, S	SK, SM,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,
	NE, S	SN, TD,	TG,	BW,	GH,	GM,	KE,	LR,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,
	TZ, U	JG, ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM			
JP 2010	278390)	A		2010	1209		JP 2	009-	1321	23		2	0090	501
PRIORITY APP	PRIORITY APPLN. INFO.:						JP 2009-132123 A 20090601				501				
OTHER SOURCE	OTHER SOURCE(S):							i 0 4							

PRI GI

Ι

AB The title organic electroluminescent device comprises ≥1 organic layer(s) containing a luminescent layer between the anode and the cathode, wherein (1) the luminescent layer contains a host material and a specific iridium phosphorescent material and (2) an organic charge block layer adjacent to the luminescent layer on its cathode side contains polycarbazole compds. [I: RI-8 = H, substituent; A = (substd.) aromatic ring; m≥2 int., n≥1 int.]. the polycarbazole charge block layers I effectively increases luminous efficiency in the electroluminescent devices.

T 881887-26-9
RL: PRP (Properties); TEM (Technical or engineered material use); USES

(Uses)
(host layer; organic electroluminescent devices provided with)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2010:1496714 CAPLUS DOCUMENT NUMBER: 154:21511

DOCUMENT NUMBER: TITLE:

Organic electroluminescence element having

light-emitting layer made of platinum phenylpyridine

derivative

INVENTOR(S): Masui, Kensuke

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 25pp.

CODEN: USXXCO
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20100301315	A1	20101202	US 2010-780581	20100514
JP 2011014873	A	20110120	JP 2010-98624	20100422
PRIORITY APPLN. INFO.:			JP 2009-132033 A	20090601
			JP 2010-98624 A	20100422

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB An organic electroluminescence element comprising an anode, a cathode, and at least one organic layer disposed between and the anode and the cathode, the organic layer containing a light-emitting layer, where the light-emitting layer contains a host material and a phosphorescent light-emitting material, and the host material contains at least one platinum complex compound containing a tetradentate ligand, expressed by a given general formula, is disclosed.

IT 881887-26-9 1227925-61-2 1256953-03-3

1256953-04-4
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(organic electroluminescence element having anode, cathode, and light-emitting compound)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1227925-61-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)[1,1'-biphenyl]-3,4-diyl- κ C4]]-, (SP-4-2)- (CA INDEX NAME)

RN 1256953-03-3 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-3,5-difluoro-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1256953-04-4 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(4-methyl-6,2-pyridinediyl- κ N)[1,1'-biphenyl]-3,4-diyl- κ C4]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 11 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2010:1226731 CAPLUS

DOCUMENT NUMBER: 153:492710
TITLE: Organic electroluminescent device

INVENTOR(S): Kinoshita, Ikuo
PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: U.S. Pat. Appl. Publ., 48pp.

CODEN: USXXCO

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

DOCUMENT TYPE:

Patent English

PATENT NO. KIND DATE APPLICATION NO. DATE US 20100244676 A1 20100930 US 2010-751066 20100331 JP 2010245063 Α 20101028 JP 2009-88523 20090331 PRIORITY APPLN. INFO .: JP 2009-88523 A 20090331

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 153:492710

AB An organic electroluminescent is provided and includes: a pair of electrodes; and at least one organic layer, between the pair of electrodes, including a light emitting layer. The device comprising, in the at least one organic layer, a compound I [Q = t-Bu or trimethylsilyl group; R = H, alkyl, cyano, aryl, or heteroaryl; n = 1 or 2].

881887-26-9 RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

881887-26-9 CAPLUS RN

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 12 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2010:1211881 CAPLUS DOCUMENT NUMBER: 153:494508

TITLE:

Organic electroluminescence devices provided with organometallic heterocyclic complex compounds Takizawa, Hiroo; Takada, Saki; Fukuzaki, Eiji Fuji Photo Film Co., Ltd., Japan Jpn. Tokkyo Koho, 144pp.

INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

CODEN: JTXXFF Patent

DOCUMENT TYPE: LANGUAGE: PATENT INFORMATION:

Japanese FAMILY ACC. NUM. COUNT: 1

PATENT NO. JP 4551480 PRIORITY APPLN. INFO.: OTHER SOURCE(S):

KIND DATE APPLICATION NO. DATE B1 20100929 JP 2009-201150 20090831 JP 2009-201150 20090831 MARPAT 153:494508

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

- The electroluminescent layer contained in organic layers bound between AB electrodes in the title organic electroluminescence device has a group I [R1 = alkyl; R2, R3 = H, alkyl; ns =1-3 int.; Z = C5-8 saturated ring substd. in metal complex compds. II [M21 = Ir; A21-23 = N, C; Z21 = (substd.) quinolyl, (substd.) isoquinolyl, (substd.) benzooxazolyl, (substd.) pyridyl, (substd.) imidazolyl, (substd.) pyrazolyl; Z22 = (substd.) Ph, (substd.) pyrazolyl, (substd.) pyridyl, (substd.) benzooxazolyl, (substd.) thiophenyl; L22,23 = C, N, O; L22,23-E21 = divalent ligand including phenylpyridyl, pyridylpyridine, picolinic acid, acetylacetone; k = 1-3int., 1 = 0-2 int., k+1=3; S21, 22 = group I; n, m = 0-4 int. where (n+m)=1-4int.], III [A141-146 = N, C; Z141,142 = isoquinoly1, benzooxazoly1, pyridyl, imidazolyl, pyrazolyl; Z143,144 = (substd.) isoquinolyl, (substd.) benzooxazolyl, (substd.) Ph, (substd.) pyridyl, (substd.) imidazolyl, (substd.) pyrazolyl; E141 = -C(R1)(R2)- divalent group; R1,2 = alkyl; S141,144 = group I; n,m,k,l = 0-2 int., (n+m+k+1)=1-2 int.], or IV [R1a-11 = H, alkyl, cycloalkyl, aryl, 2,6-dimethylphenyl, 2,4,6-trimethylphenyl, cyano, fluoro; at least 1 of R1a-11 has group I; X-Y = monoanionic divalent ligand chosen from diketones and picolic acid derivs.; n =1-3 int.]. Group I provides the organic electroluminescent devices with phosphorescent materials in high electroluminescent conversion efficiency, high durability, and low chromaticity deviation in characteristic deterioration.
- 1246565-49-0P 1246565-50-3P IT RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (organic electroluminescent layer; organic electroluminescence devices provided with organometallic heterocyclic complex compds.) 1246565-49-0 CAPLUS
- CN Platinum, [[2-(1-methylcyclopentyl)-1-[(1methylcyclopentyl)methyl]ethylidene]bis[6,2-pyridinediyl(4-cyano-2,1phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

1246565-50-3 CAPLUS RN

CN Platinum, [(1-methylethylidene)bis[[4-[(1-methylcyclopentyl)methyl]-6,2pyridinediyl](4-cyano-2,1-phenylene-KC1)]]-, (SP-4-2)- (CA INDEX

$$\begin{array}{c} \text{NC} \\ \text{C-} \\$$

L8 ANSWER 13 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

DOCUMENT NUMBER: 153:370485

TITLE:

Electroluminescent phosphorescent organic transition metal complexes, light-emitting layers containing them, organic electroluminescent devices using them,

and displays and lighting systems using the devices

2010:1065584 CAPLUS

INVENTOR(S): Fukuzaki, Eiji

PATENT ASSIGNEE (S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 117pp.

CODEN: JKXXAF DOCUMENT TYPE:

Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

ACCESSION NUMBER:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2010185068	A	20100826	JP 2009-223455	20090928
JP 4564590	B1	20101020	JP 2010-76447	20100329

PRIORITY APPLN. INFO.: JP 2009-201144 A 20090831 JP 2009-223455 A 20090928

JP 2009-223455 A 2009092
OTHER SOURCE(S): MARPAT 153:370485

AB The title complexes are represented by I [M11 = Group VIII metal, Group IB metal, preferably Ir, Pt; All = N, C; Xll = O, S, (substituted) N, single bond; Y ll = linkage, single bond; Zll = N-containing atom. group; Ll2, Ll3 = C N, O, P; Ell = atomic group forming bidentate ligand with Ll2 and Ll3; Sl1 = CE2CNe3, other branched alkyl groups (structures given), 1-adamantyl, 2-adamantyl = group substituting Ll1 and/or Zl1; k = 1-3; l = 0-2; k + l = 2, 3; n = 1-4]. The title organic electroluminescent devices may also contain carbacoles or indoles in the light-emitting layers. The title devices show high luminescence efficiency, good durability, and suppressed color shift after brightness decrease.

IT 1241050-83-8P

RN

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (manufacture of electroluminescent phosphorescent organic transition metal complexes for emitter layers of organic electroluminescent devices for displays and lighting systems)

1241050-83-8 CAPLUS

CN Platinum, [(1-methylethylidene)bis[[4-(1-methylpropyl)-6,2-pyridinediyl-KN](5-cvano-1,2-phenylene-KC2)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 14 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2010:993023 CAPLUS

DOCUMENT NUMBER: 153:272832

TITLE: Coating composition for organic electroluminescent

device and production method of vapor deposition film

INVENTOR(S): Sato, Yu

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Tokkyo Koho, 38pp.

CODEN: JTXXFF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 4523666	B1	20100811	JP 2009-180166	20090731
	JP 2011034812	A	20110217		
	KR 2011013263	A	20110209	KR 2010-72371	20100727
OF	RITY APPLN. INFO.:			JP 2009-180166 A	20090731

PRIORITY APPLN. INFO.: JP 2009-180166 A 20090731
AB The invention refers to a coating composition for an organic electroluminescent

device comprising an organic compound having mol. weight < 2000, and a medium which dissolves and disperses the organic compound and does not vaporize at the evaporation temperature of the organic compound, wherein the medium is an

organic salt or a polymethacrylate with average mol. weight > 10000, and remains a liquid under < 1 \times

10-2 Pa pressure at the evaporation temperature of the organic compound, and has a

decomposition temperature $> 30\,^{\circ}$ higher than the decomposition temperature of the organic compound

IT 881887-26-9

11 001007-20-

RL: TEM (Technical or engineered material use); USES (Uses)

(coating composition for organic electroluminescent device and production method of

vapor deposition film)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 15 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:881133 CAPLUS

DOCUMENT NUMBER: 153:188521

TITLE: Organic electroluminescent device

INVENTOR(S): Tobiyo, Manabu
PATENT ASSIGNEE(S): Fujifilm Corpo:

ATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 35pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----20100715 JP 2008-334928 JP 2010157606 20081226

PRIORITY APPLN. INFO.:

JP 2008-334928 20081226 The device is characterized by a light-emitting layer containing

electron-transporting phosphors (E) and hole-transporting host materials between a pair of electrodes, wherein the concentration of E in the layer is gradually decreased toward the anode side from the cathode side, and ≥1 phosphor having triplet energy level lower than that of E is contained in the E concentration-decreased region in 1/100-1/2-fold thickness

of

total light-emitting layer thickness. Preferably, E is Pt-centered metal complex. The organic EL device with high-brightness white light emission is provided.

808111-97-9 864541-08-2 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (phosphor with low triplet energy level; organic electroluminescent device having phosphor having controlled triplet energy level in low distribution region of electron-transporting phosphor)

808111-97-9 CAPLUS RN

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)-2,1phenylene-kCll-, (SP-4-2)- (CA INDEX NAME)



RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)(3,5difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

10/578.039

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1phenylene-KC1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 16 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN 2010:851994 CAPLUS

ACCESSION NUMBER:

DOCUMENT NUMBER: 153:188483

TITLE: Organic electroluminescent devices employing platinum

complexes

INVENTOR(S): Takada, Saki; Yagi, Kazunari; Murakami, Takeshi;

Fukuzaki, Eiji

Fujifilm Corporation, Japan PATENT ASSIGNEE(S): U.S. Pat. Appl. Publ., 85pp. SOURCE:

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20100171111	A1	20100708	US 2010-683178	20100106
PRIORITY APPLN. INFO.:			JP 2009-2056 A	20090107
			JP 2009-186893 A	20090811
			JP 2009-201156 A	20090831

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 153:188483

GI



Organic electroluminescent devices comprising a pair of electrodes and a light emitting layer between the electrodes are described in which the device has a layer containing a compound are described by the general formula I (L = a divalent linking group; Q1 and Q2 = independently selected aromatic or aliphatic heterocycle coordinated to Pt through a nitrogen atom; X1 = a 6-membered ring containing ≥1 N atoms; Q1, Q2, and X1 independently may have substituents; X2 = S, P, O, or N; and X3 = C, S, or P). Selected complexes are also described, as is light-emitting apparatus, including illumination devices, employing the electroluminescent devices. 881887-28-1

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent devices employing platinum complexes)

RN 881887-28-1 CAPLUS

Ι

CN Platinum, [[2,2'-(1-methylethylidene)bis[6-[3-(trifluoromethyl)phenyl]pyridinato]](2-)]- (9CI) (CA INDEX NAME)

L8 ANSWER 17 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN 2010:850823 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 153:188475

TITLE: Organic electroluminescent devices employing

arylene-bridged carbazole derivatives

INVENTOR(S): Kinoshita, Ikuo; Takeda, Akira; Ise, Toshihiro; Takizawa, Hiroo; Inoue, Masaaki; Kato, Takashi

PATENT ASSIGNEE (S): Fujifilm Corporation, Japan

SOURCE: U.S. Pat. Appl. Publ., 149pp. CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20100171418	A1	20100708	US 2010-683098		20100106
PRIORITY APPLN. INFO.:			JP 2009-1162	A	20090106
			JP 2009-201149	A	20090831
ACCTONIUM UTOMORIE DOD II	0 03 000	.m. 3.773.77.3.77.7	THE LOUIS DESCRIPTION DO	22342 m	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 153:188475; MARPAT 153:188475

R2 R3 N R5 R4

AB Organic electroluminescent devices comprising a pair of electrodes and an organic layer including a light-emitting layer between the electrodes are described in which the organic layers comprises compds. described by the general formula I (R1-3 = independently selected C1-6 alkyl; R4 = H or -Q'(R6)(R7)R8; R5 = H, (un)substituted alkyl, oyano, (un)substituted aryl group, or (un)substituted aryl group, or (un)substituted theteroaryl; R6-8 = independently selected C1-6 alkyl; Q, Q' = independently selected C or S1; and n = 1 or 2). The light-emitting layer may addnl. comprise ≥1 metal (especially Pt) complex and/or an adamantane derivative

IT 808111-97-9 881887-26-9 881887-28-1 881887-29-2 1227925-61-2 1234267-56-1

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent devices employing arylene-bridged carbazole derivs.)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1-phenylene-κC]]-, (SP-4-2)- (CA INDEX NAME)

RN

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

- RN 881887-28-1 CAPLUS
- CN Platinum, [[2,2'-(1-methylethylidene)bis[6-[3-(trifluoromethyl)phenyl]pyridinato]](2-)]- (9CI) (CA INDEX NAME)

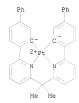
- RN 881887-29-2 CAPLUS
- CN Platinum, [[2,2'-(1-methylethylidene)bis[6-(3-fluorophenyl)pyridinato]](2-)]- (9CI) (CA INDEX NAME)

- RN 1227925-61-2 CAPLUS
- CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)[1,1-biphenyl]-3,4-diyl-KC4]]-, (SP-4-2)- (CA INDEX NAME)

10/578,039

RN 1234267-56-1 CAPLUS CN Platinum, [(1-methyle

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)[1,1'-biphenyl]-4,3-diyl- κ C3]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 18 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2010:785427 CAPLUS

DOCUMENT NUMBER: 153:130181

TITLE: Organic electroluminescent device

INVENTOR(S): Kitamura, Tetsu

PATENT ASSIGNEE(S): Fujifilm Corp., Japan

SOURCE: U.S. Pat. Appl. Publ., 56pp. CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20100155712	A1	20100624	US 2009-644303	20091222
JP 2010147441	A	20100701	JP 2008-326513	20081222
PRIORITY APPLN. INFO.:			JP 2008-326513 A	20081222
ASSIGNMENT HISTORY FOR	US PATEN	T AVAILABLE	IN LSUS DISPLAY FORMAT	
OTHER SOURCE(S):	MARPAT	153:130181		
GI				

AB An organic electroluminescent device is provided and includes: a cathode; an anode; and a light-emitting layer between the cathode and the anode. The light-emitting layer includes a compound I [L = linking group; Al-10 = C or N, provided that at least two of Al, A5, A6, and Al 0 = C atom having substituent R', R' = substituent Aving a C atom at a bonding position thereof; a plurality of Rs each independently represent a substituent; m = integer 2 - 10].

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN))(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 19 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:751949 CAPLUS

DOCUMENT NUMBER: 153:10386

TITLE: Organic white electroluminescent devices

INVENTOR(S): Shibata, Kazuyuki
PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 51pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

PR

JP 2010135689	A	20100617	JP 2008-312406	20081208
RIORITY APPLN. INFO.:			JP 2008-312406	20081208

MARPAT 153:103869

OTHER SOURCE(S):

A luminescent layer bound between a pair of electrodes in the title organic white electroluminescent device comprises an aggregate luminescent material, a monomer luminescent material, and a host luminescent material, wherein the luminescent material, and a host luminescent material, wherein the luminescent material for the monomer luminescent material. The host luminescent materials may be indole derivs. (Q)n-L101 [Q = R101-R106 substituted HH-indole, R101-105 = H, substituent; R106 = secondary or tertiary alkyl, R101 and R106 may be bonded together to form a ring; L101 = combination group; n101 = 2 int.]. The arranged materials give the organic white electroluminescent devices excellent operational durability.

T 808111-97-9 864541-08-2 916427-56-0 1229620-00-1 1229620-02-3 1229620-06-7 1229620-09-0 1229620-10-3 1229620-11-4 1229620-13-6

RL: PRPH (Prophetic); PRP (Properties)

(electron transport phosphorescent material; organic white electroluminescent devices provided with host luminescent indole derivative materials)

N 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)



ne ne

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

RN 916427-56-0 CAPLUS

CN Platinum, [(diphenylmethylene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C1]]-, (SP-4-2)- (CA INDEX NAME)



RN 1229620-00-1 CAPLUS

CN INDEX NAME NOT YET ASSIGNED



RN 1229620-02-3 CAPLUS

CN INDEX NAME NOT YET ASSIGNED



RN 1229620-06-7 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

10/578,039

RN 1229620-09-0 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1229620-10-3 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1229620-11-4 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1229620-13-6 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

ΙT 881887-26-9

RL: PRPH (Prophetic); PRP (Properties) (green phosphorescent material; organic white electroluminescent devices provided with host luminescent indole derivative materials)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)(4-cyano-2,1phenylene-kC1)]]-, (SP-4-2)- (CA INDEX NAME)

ACCESSION NUMBER: 2010:746879 CAPLUS

DOCUMENT NUMBER: 153:73062 TITLE: Organic e.

TITLE: Organic electroluminescent element
INVENTOR(S): Shibata, Kazuyuki; Satou, Tasuku
PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 132pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	ENT 1	NO.			KIN	D	DATE		- 2	APPL	ICAT	ION	NO.		D.	ATE	
WO 2	WO 2010067708			A1	A1 20100617			WO 2009-JP69878					20091125				
	W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
		ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
		KG,	KM,	KN,	KΡ,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PE,	PG,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	sv,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW	
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
		ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
		SK,	SM,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
		SN,	TD,	TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,
		ZM,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ΤJ,	TM					
JP 2	2010	1610	60		A		2010	0722		JP 2	009-	2628	75		2	0091	118
ORITY	APP:	LN.	INFO	. :						JP 2	-800	3123	25	- 2	A 2	0081	208

PRIORITY APPLN. INFO:: A 20081208

B) isclosed is an organic electroluminescent element that has on a substrate a pair of electrodes and at least one organic layer formed between the electrodes. The organic layer has at least two light-emitting layers and an intermediate layer formed between the light-emitting layers, of which there are at least two. Each of the light-emitting layers, of which there are at least two. Each of the light-emitting layers, of which there are at least two, contains a phosphorescent material. The phosphorescent material is at least one kind selected from a group comprising blue phosphorescent material having an emission peak of 420 nm to <500 mm, green phosphorescent material having an emission peak of 500 mm to <570 nm, and red phosphorescent material having an emission peak of 570 nm to <650 nm. The phosphorescent material having an emission peak of 570 nm to <650 nm. The phosphorescent materials contained in each of the light-emitting layers have mutually different emission peaks, and the

intermediate layer contains a binder material. IT 881887-26-9

(organic electroluminescent element) RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)(4-cyano-2,1-phenylene-kCl)]]-, (SP-4-2)- (CA INDEX NAME)

RL: TEM (Technical or engineered material use); USES (Uses)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 21 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:721861 CAPLUS

DOCUMENT NUMBER: 153:73017

TITLE: Organic electroluminescence device and luminescence apparatus

INVENTOR(S): Shibata, Kazuyuki; Kinoshita, Masaru

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 29pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE

	US 20100140606	A1	20100610	US 20	09-634670		20091209
	JP 2010161357	A	20100722	JP 20	09-279603		20091209
	IORITY APPLN. INFO.:				08-314813		20081210
AS	SIGNMENT HISTORY FOR US	PATE	NT AVAILABLE	IN LSU	S DISPLAY	FORMAT	
AB	The invention provide	ies an	organic EL o	levice	including	a pair	of electrodes
	and at least one lur	ninesc	ent layer loc	cated b	etween the	pair o	f electrodes,
	the luminescent laye	er inc	luding a blue	phosp	horescent	materia	l having a
	luminescence neak is	n a ra	nge of from 4	120 nm	to <500 nm	. a ore	en -

and at least one luminescent layer located between the pair of electrodes, the luminescent layer including a blue phosphorescent material having a luminescence peak in a range of from 420 nm to <500 nm, a green phosphorescent material having a luminescence peak in a range of from 500 nm to <570 nm, a red phosphorescent material having a luminescence peak in a range of from 570 nm to <650 nm, and a charge-transporting material, the charge-transporting material, the charge-transporting material having a lowest excited triplet energy level (T1) of ≥ 2.7 eV, and the T 1 of the charge-transporting material being higher than the T 1 of the blue phosphorescent material by ≥ 0.08 eV.

APPLICATION NO.

DATE

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses)
(organic electroluminescence device and luminescence apparatus)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κCl)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 22 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:721857 CAPLUS

DOCUMENT NUMBER: 153:73016

TITLE: Organic electroluminescence device and luminescence

apparatus

INVENTOR(S): Shibata, Kazuvuki; Kinoshita, Masaru; Satou, Tasuku

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan U.S. Pat. Appl. Publ., 66pp.

SOURCE: CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	DATE		
US 20100140605	A1	20100610	US 2009-632825	200912	80		
JP 2010161356	A	20100722	JP 2009-279602	200912	.09		
RIORITY APPLN. INFO.:			JP 2008-314812	A 200812	10		
COTONNENT UTCHOOSE BOD	TIC DAMENT	T TOTAL TERROR	THE COLO DECDE SHE DODAY	A FT			

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT The invention provides an organic EL device including a pair of electrodes and at least one luminescent layer between the pair of electrodes, the at least one luminescent layer including at least two phosphorescent materials, an elec. inert material, and a charge-transporting material, the at least two phosphorescent materials being selected from a blue phosphorescent material having a luminescence peak in a range of from 420 nm to <500 nm, a green phosphorescent material having a luminescence peak in a range of from 500 nm to <570 nm, or a red phosphorescent material having a luminescence peak in a range of from 570 nm to 650 nm. The invention also provides a luminescence apparatus including the above organic EL device.

881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescence device and luminescence apparatus)

RN 881887-26-9 CAPLUS

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)(4-cyano-2,1-CN phenvlene-kC1) | |-. (SP-4-2) - (CA INDEX NAME)

L8 ANSWER 23 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:721850 CAPLUS

DOCUMENT NUMBER: 153:73015

TITLE: Organic electroluminescence device

INVENTOR(S): Sotoyama, Wataru

Fujifilm Corporation, Japan PATENT ASSIGNEE(S): U.S. Pat. Appl. Publ., 80pp. SOURCE:

CODEN: USXXCO DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 20100140602	A1	20100610	US 2009-628241	20091201
	JP 2010140950	A	20100624	JP 2008-313239	20081209
PRIC	RITY APPLN. INFO.:			JP 2008-313239 2	A 20081209
ASSI	GNMENT HISTORY FOR U	JS PATEN	T AVAILABLE	IN LSUS DISPLAY FORMAT	r
AB	There is provided a	an organ	ic electrol	uminescence device comp	prising a pair of
	electrodes on a sub	strate	and at leas	t one organic layer com	ntaining a
	luminescence layer	betweer	the electr	odes, the luminescence	layer
	comprising at least	: 3 lumi	nescence ma	terials different in lu	uminescent
	color, and the at 1	Least 3	luminescenc	e materials being Pt co	omplexes.
IT	808111-97-9 881	1887-26-	.9	-	-
	RL: TEM (Technical	or engi	neered mate	rial use); USES (Uses)	
	(organic electro	lumines	cence devic	e)	
RN	808111-97-9 CAPLUS	3			
CN	Platinum, [(1-methy	lethyli	dene)bis[(6	,2-pyridinediy1-κN)-2,	1-

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 24 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:720672 CAPLUS

DOCUMENT NUMBER: 153:49004

TITLE: Organic field light emitting device

INVENTOR(S): Kinoshita, Masaru

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 43pp.; Chemical Indexing

Equivalent to 153:24314 (WO)

CODEN: JKXXAF Patent

DOCUMENT TYPE:

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

					KIN	D	DATE				ICAT				D	ATE	
JP	2010	1292	52				2010			JP 2		3004	67			0081	
WO	2010	0617	88		A1		2010	0603		WO 2	009-	JP69	700		2	0091:	120
	W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
		ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
		KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA.	MD,
		ME.	MG,	MK.	MN.	MW.	MX.	MY.	MZ.	NA.	NG.	NI.	NO.	NZ,	OM,	PE,	PG,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	sv,	SY,
		TJ,	TM,	TN,	TR.	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW	
	RW:	AT.	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI.	FR.	GB,	GR,	HR,	HU,
		IE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
		SK,	SM,	TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GO,	GW,	ML,	MR,	NE,
		SN.	TD.	TG.	BW.	GH.	GM.	KE.	LS.	MW.	MZ.	NA.	SD,	SL,	SZ.	TZ,	UG,
		ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM					
DITV	ADD	T N	TNEO							TD 2	nna_	3004	67		n 2	0081	126

PRIORITY APPLN. INFO.: JP 2008-300467 A 20081126

AB Provided is an organic field light emitting device having a high light

Provided is an organic field light emitting device having a high light emission efficiency and an improved degree of color misalignment. The organic field light emitting device includes on a substrate: an anode, a light emitting layer, and a cathode which are arranged in this order. The light emitting layer has a lst light emitting layer, a 2nd light emitting layer, and a 3rd light emitting layer which are arranged in this order when viewed from the anode side. The lst light emitting layer and the 3rd light emitting layer emit light of the same color. The 2nd light emitting layer emitting layer emitting layer the color of the light emitted from the 1st light emitting layer. At

least 1 of the 1st, the 2nd, and the 3rd light emitting layer contains a phosphorescent light emitting material which emits light having a peak wavelength in the range from 500 nm to 570 nm and a phosphorescent light emitting material which emits light having a peak wavelength of 570 nm or above.

808111-97-9 881887-26-9

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (organic field light emitting element)

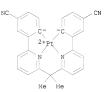
808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)-2,1phenylene-kC]]-, (SP-4-2)- (CA INDEX NAME)



RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1phenylene-kC1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 25 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:688806 CAPLUS

DOCUMENT NUMBER: 153:24335

TITLE: Organic electroluminescent device

INVENTOR(S): Satou, Tasuku; Kinoshita, Masaru; Tobise, Manabu

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE:

Jpn. Kokai Tokkyo Koho, 30pp.; Chemical Indexing

Equivalent to 152:603691 (WO)

CODEN: JKXXAF DOCUMENT TYPE: Patent Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT I	. OV			KIN	-	DATE			APPL			NO.		-	ATE	
JP	2010	1237	16		A		2010	0603		JP 2	008-	2953	32		2	0081	119
WO	2010	0587	16		A1		2010	0527		WO 2	009-	JP69	133		2	0091	110
	W:	ΑE,	AG,	AL,	AM,	AO,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
		ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
		KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PE,	PG,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	zw	
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
		ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
		SK,	SM,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,
		SN,	TD,	TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,
		ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM					
RITY	APP:	LN.	INFO	. :						JP 2	008-	2953	32		A 2	0081	119

PRI AB

Disclosed is an organic electroluminescent device with which high light-emission efficiency can be obtained with a low drive voltage. The organic electroluminescent device comprises, in order from the substrate side, a 1st electrode, a 1st hole injection layer, a 2nd hole injection layer, a light-emitting layer, and a 2nd electrode, on the substrate, with the 1st hole injection layer being in contact with the 1st electrode and containing a metal oxide, and the 2nd hole injection layer containing a hole transport material and an organic electron acceptor.

808111-97-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)-2,1phenylene-kC]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 26 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2010:683332 CAPLUS

DOCUMENT NUMBER: 153:24325

TITLE: Organic electroluminescent element and method for

manufacturing it INVENTOR(S): Hayashi, Shigeyuki

PATENT ASSIGNEE (S): Fujifilm Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 33pp.; Chemical Indexing

Equivalent to 152:603689 (WO) CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	ENT				KIN	_	DATE				-	ION				ATE	
JP	2010	1235	12		A		2010	0603		JP 2	008-		48		2	0081	121
WO	2010	0586	90		A1		2010	0527		WO 2	009-	JP68	605		2	0091	029
	W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
		ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
		KG,	KM,	KN,	KP,	KR.	KZ,	LA,	LC,	LK,	LR,	LS,	LT.	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PE,	PG,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
		TJ,	TM.	TN.	TR.	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW	
	RW:	AT.	BE.	BG.	CH,	CY.	CZ.	DE.	DK.	EE.	ES.	FI.	FR.	GB,	GR,	HR,	HU,
		IE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
		SK,	SM,	TR.	BF.	BJ,	CF.	CG,	CI,	CM,	GA,	GN.	GO,	GW,	ML,	MR.	NE,
		SN.	TD,	TG.	BW,	GH,	GM,	KE.	LS,	MW.	MZ.	NA.	SD,	SL,	SZ,	TZ,	UG,
		ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM					
RTTY	APP	LN.	INFO	. •						JP 2	008-	2983	48		A 2	0081	121

PRIORITY APPLN. INFO.: JP 2008-298348 A 20081121
AB The invention relates to a method for manufacturing an organic

electroluminescent

at

element which comprises, between a pair of electrodes, at least one organic layer including a light-emitting layer to achieve high luminance efficiency, lower driving voltage and long-lasting. At least one organic layer contains at least one kind of alkali metal, alkaline earth metal or salt of the metals. During or after film formation of the organic layer containing

least one kind of alkali metal, alkaline earth metal or salt of the metals, the method includes a heat treatment step wherein a heat treatment is carried out at a temperature not less than 50° but not more than the m.p. of the organic layer containing at least one kind of alkali metal, alkaline earth

metal or salt of the metals, or alternatively a current application step wherein a current is applied.

IT 881887-26-9

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (organic electroluminescent element and method for manufacturing it)

RN 881887-26-9 CAPLUS CN Platinum, [(1-methy

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 27 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2010:680137 CAPLUS

DOCUMENT NUMBER: 153:24314

TITLE: Organic field light emitting device

INVENTOR(S): Kinoshita, Masaru PATENT ASSIGNEE(S):

Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 71pp.; Chemical Indexing Equivalent to 153:49004 (JP)

APPLICATION NO.

DATE

CODEN: PIXXD2 DOCUMENT TYPE: Patent

PATENT NO. KIND DATE

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

							-									-		
	WO	2010	0617	88		A1		2010	0603		WO 2	009-	JP69	700		2	0091	120
		W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
								CR,										
								GH,										
			KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
								MX,										
								RU,										SY,
								TZ,										
		RW:						CZ,										
								LV,										
								CF,										
								GM,						SD,	SL,	SZ,	TZ,	UG,
								KG,										
		2010				A		2010	0610							2		
		APP									JP 2							
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			g ma	teri	al w	hich	emi	ts l	ight	hav	ing	a pe	ak w	avel	engt.	h of	570	nm or
	abo	ove.																

ΙT 808111-97-9 881887-26-9

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (organic field light emitting element)

808111-97-9 CAPLUS RN

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)-2,1phenylene-kC]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 28 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:656929 CAPLUS

DOCUMENT NUMBER: 152:603691

TITLE: Organic electroluminescent device

INVENTOR(S): Satou, Tasuku; Kinoshita, Masaru; Tobise, Manabu

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 52pp.; Chemical Indexing Equivalent to 153:24335 (JP)

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2010058716 20100527 WO 2009-JP69133 A1 20091110 W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

JP 2010123716 A 20100603 JP 2008-295332 20081119
PRIORITY APPLN. INFO:: JP 2008-295332 A 20081119

AB Disclosed is an organic electroluminescent device with which high light-emission efficiency can be obtained with a low drive voltage. The organic electroluminescent device comprises, in order from the substrate side, a 1st electrode, a 1st hole injection layer, a 2nd hole injection layer, a light-emitting layer, and a 2nd electrode, on the substrate, with the 1st hole injection layer being in contact with the 1st electrode and containing a metal oxide, and the 2nd hole injection layer containing a hole transport material and an organic electron acceptor.

I 808111-97-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1-phenylene-κC]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 29 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:656764 CAPLUS

DOCUMENT NUMBER: 152:603689

TITLE: Organic electroluminescent element and method for

manufacturing it
INVENTOR(S): Hayashi, Masayuki

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 64pp.; Chemical Indexing Equivalent to

153:24325 (JP) CODEN: PIXXD2 Patent

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	ENT :	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE		
						-												
WO	2010	0586	90		A1		2010	0527		WO 2	009-	JP68	605		2	0091	029	
	W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	
		ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	
		KG.	KM.	KN.	KP.	KR.	KZ	LA.	LC.	LK.	LR.	LS.	LT.	LII.	LY.	MA.	MD.	

ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM JP 2010123512 Α 20100603 JP 2008-298348 20081121 PRIORITY APPLN. INFO.: JP 2008-298348 A 20081121

The invention relates to a method for manufacturing an organic electroluminescent

element which comprises, between a pair of electrodes, at least one organic layer including a light-emitting layer to achieve high luminance efficiency, lower driving voltage and long-lasting. At least one organic layer contains at least one kind of alkali metal, alkaline earth metal or salt of the metals. During or after film formation of the organic layer containing

least one kind of alkali metal, alkaline earth metal or salt of the metals, the method includes a heat treatment step wherein a heat treatment is carried out at a temperature not less than 50°C but not more than the m.p. of the organic layer containing at least one kind of alkali metal. alkaline

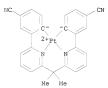
earth metal or salt of the metals, or alternatively a current application step wherein a current is applied.

881887-26-9

at

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (organic electroluminescent element and method for manufacturing it) RN 881887-26-9 CAPLUS

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1phenylene-kC1)]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT:

THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

23 L8 ANSWER 30 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN 2010:651989 CAPLUS

ACCESSION NUMBER:

DOCUMENT NUMBER: 153:24285

Organic electroluminescent element INVENTOR(S): Shibata, Kazuyuki; Sotoyama, Wataru

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 76pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIN	D	DATE			APPL	ICAT	ION	NO.			ATE	
	WO 2					A1	_	2010			WO 2	009-	JP69.	543			0091	
	1	M:	AE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
			CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
			ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
			KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
			ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PE,	PG,
			PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
			TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW	
	1	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
			IE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
			SK,	SM,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
			SN,	TD,	TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,
			ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM					
	JP 2010153820					A		2010	0708		JP 2	009-	2618	91		2	0091	117
PRIOR	RIORITY APPLN. INFO.:										JP 2	008-	2982	12		A 2	0081	121
OTHER	THER SOURCE(S):					MAR	PAT	153:	2428	5								
CT	т																	

AB Disclosed is an organic electroluminescent element for which an organic compound

layer that contains at least a light-emitting layer, a 1st electron transport layer provided in contact with the cathode-side interface of the aforementioned light-emitting layer, and a 2nd electron transport layer provided in contact with the cathode-side interface of the aforementioned 1st electron transport layer, is sandwiched between a pair of electrodes; the aforementioned light-emitting layer contains at least a light-emitting material I [AC15, AC16 = C-R or N; R = H or substituent; LC1 = single bond or divalent linking group] and a hole transportable host material; and the aforementioned 2nd electron transport layer contains an electron-transportable material phenanthrene option substituted with (R1)n group [R1 = H or C1-10 alky1(un)substituted C530 aryl; n = 0 - 8] and at least one type selected from a group comprised of an alkali metal, an

alkali metal salt, an alkali earth metal, and an alkali earth metal salt.

IT 881887-26-9 881887-28-1 1227925-61-2
RL: TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent element)

881887-26-9 CAPLUS

RN

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κCl)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-28-1 CAPLUS

CN Platinum, [[2,2'-(1-methylethylidene)bis[6-[3-(trifluoromethyl)phenyl]pyridinato]](2-)]- (9CI) (CA INDEX NAME)

RN 1227925-61-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)[1,1'-biphenyl]-3,4-diyl- κ C4]]-, (SP-4-2)- (CA INDEX NAME)

REFERENCE COUNT:

17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 31 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2010:629008 CAPLUS DOCUMENT NUMBER: 152:592160 TITLE: Group IVA element arylamido co

INVENTOR(S):

2010:629008 CAPLUS 152:592160 Group IVA element arylamido complexes as materials for organic electroluminescent devices

Stoessel, Philipp; Heil, Holger; Joosten, Dominik; Pflumm, Christof; Gerhard, Anja

PATENT ASSIGNEE(S): SOURCE: Merck Patent G.m.b.H., Germany PCT Int. Appl., 77pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PA	PATENT NO.					D	DATE			APPL	ICAT	ION	NO.			ATE	
	2010	0547	29		A2 A3		2010			WO 2	009-	EP73	61			0091	
WO	2010																
	W:						AT,										
		CA,	CH,	CL,	CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
		ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,
		KE,	KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,
		MD,	ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PE,
		PG,	PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,
		SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
		IE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
		SK,	SM,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
		SN,	TD,	TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,
		ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AP,	EA,	EP,	OA	
DE							2010	0512		DE 2	-800	1020	0805	6688	2	0081	111
PRIORIT	RIORITY APPLN. INFO.:									DE 2	-800	1020	0805	6688	A 2	0081	111
OTHER S	THER SOURCE(S):						152:	5921	60								

THER SOURCE(S): MARPAT 152:592160
B Group IVA element compds., MR2N-R1A-R1B(R1D-R1E)qY]mR44-2m [1, M = Si,
Ge, Sn, Ti, Zr, Hf, preferably M = Si, R4 = alkyl, aryl; m = 1, 2; q = 0,
1 A, B, D, E = double- or single-bonded carbon, A-B and/or E-Y may be a
part of an aromatic ring; Y = amino, O, S; R1 = H, halo, CN, NO2, amino,
C1-40 alkyl, alkoxy, alkylthio, alkenyl, (hetero)aryl, aryloxy; R2 =
alkyl, cycloalkyl, (hetero)aryl], complexes

M[R2N-RIA-RIB(RID-RIE)gY]mR46-2m (M = Cr, Mo, W) preferably compds. 1 are non-porphyrinato or porphyrinato-like, useful as electron- or exciton-blocking matrix materials for light-emitting layers of electroluminescent devices, were prepared (M = Si) by reaction of the corresponding deprotonated amines with Si precursors Sic14, R42Sic12 and tested as additives for electron-blocking layers and light-emitting layers (3-30%), which substantially increased efficiency of phosphorescent substances, such as tris(phenylpyridine)iridium. In an example, reaction

of 300 mmol of the diamine Q(NHÅr)2 (Q=1,2-C6H4, 4,5-Me2-1,2-C6H2, 1,1'-bipheny|-1,2-cdiy|, Ar=Ph, MeC6H4, PhC6H4) with 600 mmol of BuLi in 2 L of Et2O followed by addition of 150 mmol of SiC14 gave compds. 1, Si[Q(NAr2)]2 (la, same Q, Ar) with 27-618 yields. In another example, an organic light-emitting device (OLED), having the compound 1,

Si[1,2-C6H4(NPh)2]2 (1b) as a electron-blocking layer and as a dopant to light-emitting layer, consisting of bis(1,1':3',1'':3',1''':3''',1''''-quinquephenyl-5''-yl)methanone (M1),

objed with 10% of 1b and 10% of tris(2-phenylpyridine)iridium, showed an efficiency of 54 cd/A, compared to 32.8 cd/A for similar device without 1b.

I 1227140-79-5

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(preparation of silicon chelate tetramides and diorganosilane diamides as additives for electron—and exciton—blocking layers, dopants for OLED light—emitting layers)

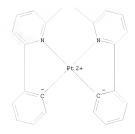
RN 1227140-79-5 CAPLUS

N Platinum, [9H-fluoren-9-ylidenebis[(6,2-pyridinediyl-κN)-2,1-

phenylene-kCl]]-, (SP-4-2)- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A



ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

INVENTOR(S): PATENT ASSIGNEE(S):

L8 ANSWER 32 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN 2010:625476 CAPLUS

152:579240 Organic electroluminescent elements employing sequentially formed Al and Ag electrode layers Kitamura, Yoshitaka

FujiFilm Corporation, Japan

SOURCE: U.S. Pat. Appl. Publ., 24pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 20100123126 A1 20100520 US 2009-617736 20091113
P 2010123439 A 20100603 JP 2008-296859 20081120
PRIORITY APPLN INFO.: JP 2008-296859 A 2008120

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Organic electroluminescent elements are described which comprise a first electrode, an organic layer including at least a light emitting layer, and a second electrode, disposed in this order, where the second electrode comprises, starting from the side of the organic layer, an aluminum (Al) layer having a thickness of 0.1 mm to 10 nm and a silver (Ag) layer having a thickness of 3 nm to 50 nm. Preferably, the organic layer includes an electron injection layer doped with an alkali metal, and a layer of an alloy of Al and Li is disposed between the organic layer and the second electrode.

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses)
(OLED employing sequentially formed Al and Ag electrode layers)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κCl)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 33 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:568075 CAPLUS

DOCUMENT NUMBER: 152:537783

TITLE: Organic electroluminescent element

INVENTOR(S): Hayashi, Masayuki

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 111pp.; Chemical Indexing

Equivalent to 152:537678 (WO)
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

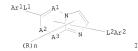
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2010103306 A 20100506 JP 2008-273308 20100429 WO 2009-JP67902 20081023 WO 2010047279 A1 20091016 W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM JP 2008-273308 A 20081023

PRIORITY APPLN. INFO.: GI



AB Disclosed is an organic electroluminescent element that comprises a luminescent layer containing an electron transport phosphorescent material, a cathode, and an electron transport layer provided between the luminescent layer and the cathode, where in the electron transport layer contains a N-containing heterocyclic compound I [A1-3 = N or C; Ar1 = (un)substituted C6-60

aryl or (un)substituted C3-60 heteroaryl; Ar2 = H, (un)substituted C6-60 aryl, C3-60 heteroaryl, C1-20 alkyl, or C1-20 alkoxy, provided that either Arl or Ar2 represents a (un)substituted C10-60 condensed ring or C3-60 monohetero condensed ring; L1,2 = single bond, (un)substituted C6-60 arylene, C3-60 heteroarylene, or fluorenylene; R = H, (un)substituted C6-60 aryl, C3-60 heteroaryl, C1-20 alkyl, or C1-20 alkoxy; n = integer of 0 to 5; if n > 2, adjacent R's may join to form aliphatic or aromatic rings]. IT 808111-97-9 864541-08-2 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent element)

808111-97-9 CAPLUS RN

CN Platinum, ((1-methylethylidene)bis((6,2-pyridinediyl-KN)-2,1phenylene-KCll-, (SP-4-2)- (CA INDEX NAME)

10/578,039

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 34 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:530402 CAPLUS

DOCUMENT NUMBER: 152:537678

TITLE: Organic electroluminescent element

INVENTOR(S): Hayashi, Masayuki

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 171pp.; Chemical Indexing Equivalent

GI

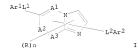
DOCUMENT TYPE:

to 152:537783 (JP) CODEN: PIXXD2

Patent Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	PATENT NO.					D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
WO	2010	0472	 79		A1	-	2010	0429		WO 2	009-	JP67	902		2	0091	016
	W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
		ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
	KG, KM, K					KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
	ME, MG, M					MW,	MX,	MY,	ΜZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PE,	PG,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	zw	
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HR,	HU,
		IE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
		SK,	SM,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
		SN,	TD,	TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NΑ,	SD,	SL,	SZ,	TZ,	UG,
	ZM, ZW, Al						KG,	ΚZ,	MD,	RU,	ΤJ,	TM					
JP	2010		A		2010	0506		JP 2	008-	2733	08		2	0081	023		
PRIORITY										JP 2	-800	2733	80	- 1	A 2	0081	023
OTHER SO	DURCE	(S):			MAR	PAT	152:	5376	78								



- AB Disclosed is an organic electroluminescent element that comprises a luminescent layer containing an electron transport phosphorescent material, a cathode, and an electron transport layer provided between the luminescent layer and the cathode, where in the electron transport layer contains a N-containing heterocyclic compound I [Al-3 = N or C; Arl = aryl or heteroaryl; Ar2 = H, aryl, heteroaryl, alkyl, or alkoxy, provided that any one of Ar1 and Ar2 represents a condensed ring group or a monohetero condensed ring group; Ll,2 = single bond, arylene, heteroarylene, or fluorenylene; R = H, aryl, heteroaryl, alkyl, or alkoxy; n = integer of 0 to 5.].

 IT 80811-97-9 864541-08-2 881887-26-9
- RL: TEM (Technical or engineered material use); USES (Uses)
 (organic electroluminescent element)
- RN 808111-97-9 CAPLUS
- CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1-phenylene-κC]]-, (SP-4-2)- (CA INDEX NAME)

10/578,039

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

REFERENCE COUNT:

INVENTOR(S):

19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 35 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2010:412939 CAPLUS DOCUMENT NUMBER: 152:443958

DOCUMENT NUMBER: 152:443

Polyheterocyclic organic electroluminescent devices Takada, So PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE:

Fujifilm Corporation, Japan Jpn. Kokai Tokkvo Koho, 65pp. CODEN: JKXXAF Pat.ent.

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. JP 2010074111 A 20100402 JP 2008-243383 20080922

JP 2008-243383

20080922

Japanese

PRIORITY APPLN. INFO.: OTHER SOURCE(S):

MARPAT 152:443958



- AB The title polyheterocyclic organic electroluminescent device has ≥1 organic electroluminescent layer(s) bound between a pair of electrodes, wherein the organic electroluminescent layer(s) contain (1) a polyheterocyclic organic electroluminescent material [I: Q1-3 = aromatic hydrocarbon ring, aromatic heterocyclic ring; L1-2 = CR11, N, P, SiR12; C11-12 = H, substituent] and (2) a phosphorescent material. Polyheterocyclic organic electroluminescent materials provides the organic electroluminescent devices with excellent emission efficiency and excellent emission coloring.
- ΙT 881887-26-9
 - RL: PRP (Properties); TEM (Technical or engineered material use); USES
 - (electroluminescent material; polyheterocyclic organic electroluminescent devices)
- 881887-26-9 CAPLUS RN
- Platinum, ((1-methylethylidene)bis((6,2-pyridinediyl-κN)(4-cyano-2,1-CM phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 36 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:274962 CAPLUS

DOCUMENT NUMBER: 152:322352

TITLE: Organic electroluminescent devices having high luminous efficiency and low driving voltage and

employing nitrogen-containing heterocyclic

phosphorescent compounds

INVENTOR(S): Fukuzaki, Eiji
PATENT ASSIGNEE(S): Fujifilm Corp.

PATENT ASSIGNEE(S): Fujifilm Corp., Japan SOURCE: U.S. Pat. Appl. Publ., 68pp.

CODEN: USXXĈÔ

DOCUMENT TYPE: Patent LANGUAGE: English

LANGUAGE: Englis FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20100051928	A1	20100304	US 2009-554338	20090904
JP 2010087496	A	20100415	JP 2009-203152	20090902
PRIORITY APPLN. INFO.:			JP 2008-227269	A 20080904
ASSIGNMENT HISTORY FOR	US PATEN	IT AVAILABLE	IN LSUS DISPLAY FORM	ΑT
OTHER SOURCE(S):	CASREA	CT 152:3223	52	
GI				

AB Organic electroluminescent devices having high luminous efficiency and low driving voltage are described which comprise a pair of electrodes; and at least one organic layer including a light emitting layer, the light emitting layer being provided between the pair of electrodes, where at least one layer of the at least one organic layer contains a compound represented by

formula (1), where each of Z11 and Z12 independently represents an aromatic heterocyclic ring or an aromatic hydrocarbon ring, R11 represents a hydrogen atom or a substituent, provided that a plurality of R11s are the same or different; m represents an integer of 1 or more; and L1 represents a single bond or an m-valent linking group and is linked to any one of C atoms in R11, Z11 and Z12, provided that when m is 1, L1 does not exist. 881887-66-9

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(light-emitting layer containing; organic electroluminescent devices having high luminous efficiency and low driving voltage and employing nitrogen-containing heterocyclic phosphorescent compds.)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κCl)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 37 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:274249 CAPLUS

DOCUMENT NUMBER: 152:346987

TITLE: Color electroluminescent display and method for

producing the same
INVENTOR(S): Sakamoto, Yoshiaki

PATENT ASSIGNEE(S): FujiFilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 23pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE US 20100053038 A1 US 2009-506273 20100304 JP 2010056016 JP 2008-221880 Α 20080829 PRIORITY APPLN. INFO .: JP 2008-221880 20080829

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB A color display is described which includes a plurality of pixels on a
substrate, each pixel being area-divided into plural sub-pixels including
at least two sub-pixels that each emit colored light of different
wavelengths and a white sub-pixel, wherein the at least two sub-pixels and
the white sub-pixel each have at least an optical path length-adjusting
layer and an organic electroluminescent layer interposed between a layer that

partially transmits light and partially reflects light and a light reflection layer to form a resonator structure.

IT 808111-97-9

RL: TEM (Technical or engineered material use); USES (Uses) (color electroluminescent display containing white light-emitting subpixels for rich color reproduction and gradation)

808111-97-9 CAPLUS

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1phenylene-kC]]-, (SP-4-2)- (CA INDEX NAME)



ANSWER 38 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:265564 CAPLUS

DOCUMENT NUMBER: 152:322707

TITLE: Color electroluminescent display device and method for

manufacturing the same INVENTOR(S): Kinoshita, Masaru PATENT ASSIGNEE(S): Fujifilm Corp., Japan

SOURCE: Eur. Pat. Appl., 28pp. CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: Enalish

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	ENT	NO.			KIN	D	DATE			APE	PLI	ICAT	ION :	NO.		D	ATE	
							_										-		
	EP	2159	843			A2		2010	0303		ΕP	20	009-	1098	0		2	0090	827
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	Ξ,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
			IE,	IS,	IT,	LI,	LT,	LU,	LV,	MC,	ME	Κ,	MT,	NL,	NO,	PL,	PT,	RO,	SE,
			SI,	SK,	SM,	TR,	AL,	BA,	RS										
	JΡ	2010	0560	17		A		2010	0311		JΡ	20	-800	2218	81		2	0080	829
	US	2010	0052	524		A1		2010						5442				0090	
	CN	1016	6195	1		A		2010	0303		CN	20	009-	1017	0452		2	0090	826
ЭF	RITY	APP	LN.	INFO	.:						JΡ	20	-800	2218	81	1	A 2	0080	829

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT Disclosed is a color display device containing plural pixels on a substrate, each pixel is composed of plural sub-pixels which emit lights different in wavelength in the visible range and a white sub-pixel, the plural sub-pixels and the white sub-pixel each have a white organic electroluminescence layer interposed between an optically semitransparent reflection layer and a light reflection layer, the optical distance between the optically semitransparent reflection layer and the light reflection layer in each of the plural sub-pixels forms a resonator having a distance for resonating emitted light, and the optical distance between the optically semitransparent reflection layer and the light reflection layer in the white sub-pixel is longer than the maximum optical distance between the optically semitransparent reflection layer and the light

reflection layer in each of the plural sub-pixels.

IT 808111-97-9

RL: TEM (Technical or engineered material use); USES (Uses)
(color electroluminescent display device and method for manufacturing the same)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)-2,1-phenylene-KC]]-, (SP-4-2)- (CA INDEX NAME)



OS.CITING REF COUNT: 1

1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 39 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1598341 CAPLUS

DOCUMENT NUMBER: 152:107817

TITLE: Organic electroluminescent device

INVENTOR(S): Ise, Toshihiro
PATENT ASSIGNEE(S): Fujifilm Corpo:

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 38pp.

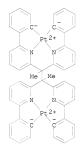
CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2009302152	A	20091224	JP 2008-152244	20080610
PRIORITY APPLN. INFO.:			JP 2008-152244	20080610
OTHER SOURCE(S):	MARPAT	152:107817		
GI				

- AB The invention refers to an organic electroluminescent device comprising a metal complex I [0.1+e=a groups able to form a covalent bond with Pt; R1-4, R11-13, R21-23, R31-33, R41-43 = H or substituent; n = 0 6] in the oranic layer.
- IT 1202171-63-8 1202171-64-9 1202171-65-0 1202171-66-1 1202171-66-1 1202171-66-3 RI: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)
- RN 1202171-63-8 CAPLUS
- CN Platinum, $[\mu-[(1,2-dimethyl-1,2-ethanediylidene)tetrakis[(6,2-pyridinediyl-<math>\kappa$ N)-2,1-phenylene- κ Cl]]]di- (CA INDEX NAME)



- RN 1202171-64-9 CAPLUS
- CN Platinum, [μ-[(1,3-dimethyl-1,3-propanediylidene)tetrakis[(6,2-pyridinediyl-κN)-2,1-phenylene-κC1]]]di- (CA INDEX NAME)

RN 1202171-65-0 CAPLUS

CN Platinum, $[\mu-[(1,5-dimethyl-1,5-pentanediylidene)tetrakis[(6,2-pyridinediyl-<math>\kappa$ N)-2,1-phenylene- κ Cl]]]di- (CA INDEX NAME)

RN 1202171-66-1 CAPLUS

Platinum, [μ-[(1,2-dimethyl-1,2-ethanediylidene)tetrakis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC1)]]]di- (CA INDEX NAME)

1202171-67-2 CAPLUS RN

Platinum, [µ-[(1,3-dimethyl-1,3-propanediylidene)tetrakis[(6,2-pyridinediyl-kn)(3,5-difluoro-2,1-phenylene-kCl)]]]di- (CA INDEX NAME) CN

PAGE 2-A

RN 1202171-68-3 CAPLUS

Platinum, $[\mu_{-}[(1,5-dimethyl-1,5-pentanediylidene)tetrakis[(6,2-pyridinediyl-kN)(3,5-difluoro-2,1-phenylene-kCl)]]]di- (CA INDEX NAME)$ CN

PAGE 2-A

L8 ANSWER 40 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2009:1365572 CAPLUS

DOCUMENT NUMBER: 151:539991

TITLE:

Organic electroluminescent device

Ise, Toshihiro; Sano, Satoshi; Murakami, Takeshi Fujifilm Corporation, Japan INVENTOR(S): PATENT ASSIGNEE (S):

SOURCE: Jpn. Kokai Tokkyo Koho, 106pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2009260286	A	20091105	JP 2009-53876	20090306
PRIORITY APPLN. INFO.:			JP 2008-74723 A	20080321
OTHER SOURCE(S):	MARPAT	151:539991		

$$\begin{array}{c|c}
 & R^1 & R^2 \\
\hline
 & Q^1 & C & \\
\end{array}$$

AB The invention relate to an organic electroluminescent device, comprising a compound represented by I [n = integer ≥ 3; Q1 = benzene ring and aromatic heterocyclic sincle ring; and R1 and R2 = H and substituent].

II 881887-26-9 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent device) RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 41 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1202344 CAPLUS DOCUMENT NUMBER: 151:414282

TITLE: Organic electroluminescent device

INVENTOR(S): Organic electroluminescent device INVENTOR(S): Fukuzaki, Eiji

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 101pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2009224762	A	20091001	JP 2009-2057	20090107
PRIORITY APPLN. INFO.:			JP 2008-36434 A	20080218

OTHER SOURCE(S): MARPAT 151:414282

The invention relates to an organic electroluminescent device, comprising the compound represented by I [Z1 = aromatic heterocyclic residue; Z2 = aromatic heterocyclic residue and aromatic hydrocarbon ring residue; Z3 = divalent linking group and single bond; R111 = H and substituent group] and a Pt complex containing a tetradentate ligands.

ΙT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)(4-cyano-2,1phenylene-kC1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 42 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1135632 CAPLUS

DOCUMENT NUMBER: 151:369636

TITLE: Organic electroluminescent device

INVENTOR(S): Kitamura, Yoshitaka; Tobiyo, Manabu; Kinoshita, Masaji PATENT ASSIGNEE(S): Fuiifilm Corporation, Japan

Jpn. Kokai Tokkyo Koho, 88pp. SOURCE:

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2009212235	A	20090917	JP 2008-52505	20080303
PRIORITY APPLN. INFO.:			JP 2008-52505	20080303

AB The invention refers to an organic electroluminescent device comprising a luminescent layer and a electron transport layer between a cathode and an anode, wherein the luminescent layer contains an electron transporting

luminescent material, and a hole transporting host material, and the concentration of the electron transporting luminescent material gradually increases from the anode side to the cathode side, and the electron transport layer contains a hole transporting material and electron transporting material, and the concentration of the hole transporting material

in the electron transport layer gradually decreases from the anode side to the cathode side or the concentration of electron transporting material gradually

increases from the anode side to the cathode side.

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent device)

881887-26-9 CAPLUS RN

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)(4-cyano-2,1-CN phenylene-KC1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 43 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1080102 CAPLUS

DOCUMENT NUMBER: 151:347264

TITLE: Organic electroluminescent devices using adamantane derivatives in the charge transport layers

INVENTOR(S): Shibata, Kazuvuki; Sotoyama, Wataru; Tobise, Manabu;

Takeda, Akira

Fujifilm Corp., Japan PATENT ASSIGNEE(S): SOURCE:

U.S. Pat. Appl. Publ., 61pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 20090218936	A1	20090903	US 2009-379517	20090224		
JP 2010161326	A	20100722	JP 2009-37105	20090219		
PRIORITY APPLN. INFO.:			JP 2008-48629 A	20080228		
			JP 2008-313240 A	20081209		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 151:347264

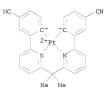


AB Organic electroluminescent devices comprising ≥1 organic compound layer including a light-emitting layer disposed between a pair of electrodes are described which are provided with a charge transport layer adjacent to the light-emitting layer which contains a charge transporting material and a compound described by the general formula I (R1-4 = independently selected H, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, aryl, heteroaryl, C1-6 alkoxy, acyl, acyloxy, amino, nitro, cyano, ester, amido, halo, C1-6 perfluoroalkyl, or silyl; ≥1 of R1-4 = a group having a double bond or a triple bond; and X1-12 = independently selected H, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, aryl, heteroaryl, C1-6 alkoxy, acyl, acyloxy, amino, nitro, cyano, ester, amido, halo, C1-6 perfluoroalkyl, or silyl). The light-emitting material may be a metal complex. 881887-26-9

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent devices using adamantane derivs. in charge

transport lavers) 881887-26-9 CAPLUS RN

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1phenylene-kC1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 44 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1080101 CAPLUS

DOCUMENT NUMBER: 151:347263

TITLE: Organic electroluminescent devices using adamantane derivatives in the active layer

INVENTOR(S):

Sotoyama, Wataru; Shibata, Kazuyuki; Tobise, Manabu;

Takeda, Akira PATENT ASSIGNEE(S): Fujifilm Corp., Japan

SOURCE: U.S. Pat. Appl. Publ., 98pp. LANGUAGE:

DOCUMENT TYPE:

CODEN: USXXCO

Patent

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

English

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
US 20090218935	A1	20090903	US 2009-379489	20090224			
JP 2010161325	A	20100722	JP 2009-37104	20090219			
PRIORITY APPLN. INFO.:			JP 2008-48628 A	20080228			
			JP 2008-315024 A	20081210			

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 151:347263

GI



- Organic electroluminescence devices which comprise ≥1 organic compound AB layer including a light-emitting layer disposed between a pair of electrodes are described in which the light-emitting layer includes a light-emitting material, a charge transporting material, and a compound described by the general formula I (R1-4 = independently selected H, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, aryl, heteroaryl, C1-6 alkoxy, acyl, acyloxy, amino, nitro, cyano, ester, amido, halo, C1-6 perfluoroalkyl, or silvl; ≥1 of R1-4 = a group having a double bond or a triple bond; and X1-12 = independently selected H, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, aryl, heteroaryl, C1-6 alkoxy, acyl, acyloxy, amino, nitro, cyano, ester, amido, halo, C1-6 perfluoroalkyl, or silyl). The light-emitting material may be a metal complex.
- 808111-97-9 881887-26-9 TT RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 - (organic electroluminescent devices using adamantane derivs. in the active layer)
 - 808111-97-9 CAPLUS

RN

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)-2,1phenylene-KC]]-, (SP-4-2)- (CA INDEX NAME)

10/578.039

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)(4-cyano-2,1phenylene-kC1)]]-, (SP-4-2)- (CA INDEX NAME)

ANSWER 45 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1079992 CAPLUS

DOCUMENT NUMBER: 151:325126

TITLE: Organic electroluminescence element having double electroluminescent layers with electron transporting and hole transporting light-emitting materials with

different ratio

INVENTOR(S): Kitamura, Yoshitaka: Tobise, Manabu: Kinoshita, Masaru

Fujifilm Corporation, Japan PATENT ASSIGNEE(S): SOURCE:

U.S. Pat. Appl. Publ., 52pp.

CODEN: USXXCO

Patent

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DOCUMENT TYPE:

LANGUAGE:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 20090218561	A1	20090903	US 2009-379329	20090219		
JP 2009211892	A	20090917	JP 2008-52504	20080303		
IORITY APPLN. INFO.:			JP 2008-52504 A	20080303		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

An organic electroluminescence element is described comprising at least two light-emitting layers disposed between an anode and a cathode, wherein the at least two light-emitting layers include a light-emitting layer A that contains an electron transporting light-emitting material and a hole transporting host material, wherein a concentration of the electron transporting

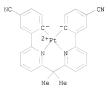
light-emitting material gradually increases from an anode side toward a cathode side of the light-emitting layer A, and a light-emitting layer B that contains a hole transporting light-emitting material and an electron transporting host material, wherein a concentration of the hole transporting light-emitting material gradually decreases from an anode side toward a cathode side of the light-emitting layer B. An organic EL element with high light-emission efficiency and excellent durability is provided.

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses)
(electroluminescent layer host; organic electroluminescence element having
double electroluminescent layers with electron transporting and hole
transporting light-emitting materials with different ratio)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κCl)]], (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 46 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1073405 CAPLUS

DOCUMENT NUMBER: 151:325093

TITLE: Organic electroluminescence device having organic layers contains hydrocarbon compound having alkyl structure and charge transporting material

INVENTOR(S): Takeda, Akira; Tobise, Manabu; Satou, Tasuku
PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: Eur. Pat. Appl., 46pp.

CODEN: EPXXDW DOCUMENT TYPE: Patent

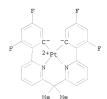
LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

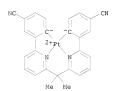
PA	PATENT NO. KIND DATE					APF	LICA	DATE										
	EP 2096690 A2 20090902					EP 2009-2857					20090227							
				20090902 EF 2009-2057 20110119					20030227									
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES	, FI,	FR,	GB,	GR,	HR,	HU,
									LV,	MC,	MK	, MT	, NL,	NO,	PL,	PT,	RO,	SE,
			SI,	SK,	TR,	AL,	BA,	RS										
JF	•	2009	2318	07		A		2009	1008		JΡ	2009	-2059			2	0090	107
US	3	2009	0218	938		A1		2009	0903		US	2009	-3922	89		2	0090	225
CN	Į	1015	2126	4		A		2009	0902		CN	2009	-1012	6609		2	0090	227
KF	2	2009	0938	94		A		2009	0902		KR	2009	-1710	0		2	0090	227
RIORIT	Y	APP	LN.	INFO	. :						JΡ	2008	-4850	19		A 2	0080	228
											JΡ	2009	-2059			A 2	0090	107

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

- AB An organic electroluminescence device is described comprising a pair of electrodes; and at least one organic layer including a light-emitting layer being provided between the pair of electrodes, wherein at least any one of the at least one organic layer contains both at least one hydrocarbon compound having an alkyl structure and a charge transporting material.
- 864541-08-2 881887-26-9
 - RL: TEM (Technical or engineered material use); USES (Uses) (light emitting material; organic electroluminescence device having organic layers contains hydrocarbon compound having alkyl structure and charge transporting material for preferably lowering driving voltage)
- RN 864541-08-2 CAPLUS
- CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)(3,5difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)



- 881887-26-9 CAPLUS Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)(4-cyano-2,1phenylene-kC1)]]-, (SP-4-2)- (CA INDEX NAME)



- OS.CITING REF COUNT:
- THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD 1 (4 CITINGS)

ANSWER 47 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN 2009:1028742 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

TITLE:

RN

151:381856

Norbornene-Based Copolymers Containing Platinum Complexes and Bis(carbazolyl)benzene Groups in Their Side-Chains

AUTHOR(S):

Feng, Ke; Zuniga, Carlos; Zhang, Ya-Dong; Kim, Dongwook; Barlow, Stephen; Marder, Seth R.; Bredas, Jean Luc; Weck, Marcus

CORPORATE SOURCE: School of Chemistry and Biochemistry, Georgia

Institute of Technology, Atlanta, GA, 30332, USA

SOURCE: Macromolecules (Washington, DC, United States) (2009),

42(18), 6855-6864

CODEN: MAMOBX; ISSN: 0024-9297

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 151:381856

Two norbornene-functionalized tetradentate cyclometalated platinum(II)

complexes were synthesized and copolymd. with a bis(carbazolyl)benzene-based comonomer using ring-opening metathesis

polymerization (ROMP). The copolymers are soluble in common solvents and the

mol.

wts. of these copolymers can be well controlled as a result of the living character of the ROMP. The photophys. and electrochem. properties of the copolymers were compared to their corresponding small mols. The copolymers showed almost identical photophys. and electrochem. properties demonstrating the inertness of the polymer backbone toward the photophys. properties of the tethered platinum complexes. All complexes exhibit bright photoluminescence in the green region with lifetimes around 0.4 us and solution phosphorescence quantum efficiencies as high as 0.56. which suggest that these materials could be interesting for OLED applications.

1187677-42-4P 1187677-48-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (crystal structure; norbornene-based copolymers containing platinum complexes and bis(carbazolyl)benzene groups in their side-chains)

RN 1187677-42-4 CAPLUS

CN Platinum, [(1-methoxyethylidene)bis[(2,6-pyridinediyl-κN)(4,6difluoro-1,2-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

1187677-48-0 CAPLUS RN

CN Platinum, [(1-fluoroethylidene)bis[(2,6-pyridinediyl-κN)(4,6difluoro-1,2-phenylene-xC)]]-, (SP-4-2)- (CA INDEX NAME)

10/578,039

IT 1187677-52-6P 1187677-53-7P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (norbornene-based copolymers containing platinum complexes and bis(carbazolv1)benzene groups in their side-chains)

RN 1187677-52-6 CAPLUS

CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-methoxyhexylidene)bis[(2,6pyridinediyl-kN)(4,6-difluoro-1,2-phenylene-kC)]]-, (SP-4-2)-, polymer with bicyclo[2.2.1]hept-5-en-2-ylmethyl 3,5-di-9H-carbazol-9-ylbenzoate (CA INDEX NAME)

CM

CRN 1187677-47-9 CMF C36 H32 F4 N2 O Pt CCI CCS

CM 2

CRN 1167996-20-4 CMF C39 H30 N2 O2 10/578,039

RN 1187677-53-7 CAPLUS CN Platinum, [(6-bicycle

Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-fluorohexylidene)bis[(2,6-pyridinediy]-xM)(4,6-difluoro-1,2-phenylene-xC)]]-, (SP-4-2)-, polymer with bicyclo[2.2.1]hept-5-en-2-ylmethyl 3,5-di-9H-carbazol-9-ylbenzoate (CA INDEX NAME)

CM

CRN 1187677-51-5 CMF C35 H29 F5 N2 Pt CCI CCS

CM

CRN 1167996-20-4 CMF C39 H30 N2 O2

IT 1187677-47-9P 1187677-51-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (norbornene-based copolymers containing platinum complexes and

(norbornene-based copolymers containing platinum complexes and bis(carbazolyl)benzene groups in their side-chains)

RN 1187677-47-9 CAPLUS

CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-methoxyhexylidene)bis[(2,6pyridinediyl-kN)(4,6-difluoro-1,2-phenylene-kC)]]-, (SP-4-2)-(CA INDEX NAME)

RN 1187677-51-5 CAPLUS

CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-fluorohexylidene)bis[(2,6-pyridinedyl-xN) (4,6-difluoro-1,2-phenylene-xC)]]-, (SP-4-2)-(CA INDEX NAME)

OS.CITING REF COUNT:

THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

REFERENCE COUNT:

THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS 85 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 48 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ESSION NUMBER: 2009:732579 CAPLUS

6

ACCESSION NUMBER:

DOCUMENT NUMBER: 151:89517

TITLE:

Platinum complex compound and organic electroluminescence device using the same

INVENTOR(S): Kinoshita, Ikuo; Murakami, Takeshi; Igarashi, Tatsuya PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: Eur. Pat. Appl., 53pp.

CODEN: EPXXDW DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.)	DATE			APP	LICA	TION	NO.		DATE				
	EP 2	2070	936			A1		2009	0617	1	EΡ	2008	-2162	3		20	0081	212		
	EP :	2070	936			B1		2010	0526											
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES	, FI,	FR,	GB,	GR,	HR,	HU,		
			IE,	IS,	IT,	LI,	LT,	LU,	LV,	MC,	MI	, NL	, NO,	PL,	PT,	RO,	SE,	SI,		
			SK,	TR,	AL,	BA,	MK,	RS												
	JP :	2009	16152	24		A		2009	0723		JP	2008	-3157	88		21	0081	211		
	US :	2009	01530	145		A1		2009	0618	1	JS	2008	-3333	70		20	0081	212		
	AT 4	4691	60			T		2010	0615	- 2	TΑ	2008	-2162	3		20	0081	212		
	PRIORITY	APP:	LN.	INFO	. :						JP	2007	-3236	82	Z	1 20	0071	214		
	ASSIGNMEN	H TV	ISTOR	RY F	OR U	S PA	TENT	AVA	ILABI	LE II	N L	SUS	DISPL	AY F	ORMA?	Γ				
	OTHER SOU	JRCE	(S):			MAR	PAT	151:	8951	7										
	CT																			

AB The invention refers to a platinum complex compound I [Arl,2 = aromatic ring or aromatic heterocyclic, Rl-4 = H or substituent; Zl,2 = C or N; Ql = aromatic or aromatic heterocycle containing C atom and Zl, and Ql = aromatic or aromatic heterocycle ring containing C atom and Zl; and Al = single bond or divalent linking group].

IT 1160958-76-8 1160958-78-0 1160958-80-4 1160958-81-5

Ι

RL: TEM (Technical or engineered material use); USES (Uses)
(platinum complex compound and organic electroluminescence device using the same)

RN 1160958-76-8 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(5-phenyl-6,2-pyridinediyl-κN)-2,1-phenylene-κC]]-, (SP-4-2)- (CA INDEX NAME)

RN 1160958-78-0 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(5-phenyl-6,2-pyridinediyl-κN)(4-fluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1160958-80-4 CAPLUS

CN Platinum, [(1-methylethylidene)bis[[5-(1H-imidazol-1-yl)-6,2-pyridinediyl-κN](5-fluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1160958-81-5 CAPLUS

CN Platinum, [(diphenylmethylene)bis[[5-[4-(trifluoromethyl)phenyl]-6,2-pyridinediyl-kN][4-(trifluoromethyl)-2,1-phenylene-kC]]]-, (SP-4-2)- (CA INDEX NAME)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 49 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:455239 CAPLUS

DOCUMENT NUMBER: 150:460455

TITLE: Organic field emission element with improved

durability and efficiency containing platinum complex

and silane derivative

INVENTOR(S): Fukuzaki, Eiji; Igarashi, Tatsuya
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 92pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2009081409	A	20090416	JP 2008-46317	20080227

PRIORITY APPLN. INFO.:

JP 2007-119534 A 20070427 JP 2007-229024 A 20070904

OTHER SOURCE(S):

MARPAT 150:460455

R101 R102 R107 R105 Si R108 R106 Si R103 R104

- AΒ Disclosed is an organic field emission element such as an organic EL element containing between a pair of electrodes a silane derivative represented by I (R101-108 = H, substituent) and a Pt complex having a tetradentate ligand.
- 881887-26-9
 - RL: TEM (Technical or engineered material use); USES (Uses) (Organic field emission element with improved durability and efficiency containing platinum complex and silane derivative)
- 881887-26-9 CAPLUS RN
- Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)(4-cyano-2,1phenylene-KC1) | |- (SP-4-2) - (CA INDEX NAME)

L8 ANSWER 50 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2009:138827 CAPLUS

DOCUMENT NUMBER: 150:202540

TITLE: Organic electroluminescent devices with graded

concentrations of electron-transporting light-emitting materials in hole-transporting hosts

INVENTOR(S): Kinoshita, Masaru; Tobise, Manabu

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 75pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 2009017210
                                20090205
                                           WO 2008-JP63813
                                                                   20080725
                         A1
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             CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG,
             KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
            MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
             PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
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             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
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     JP 2009032977
                                20090212
                                           JP 2007-196527
                                                                   20070727
                          A
     EP 2174363
                                20100414
                                            EP 2008-792026
                                                                   20080725
                          A1
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
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             SK, TR, AL, BA, MK, RS
     KR 2010066445
                                20100617
                          Α
                                            KR 2010-7003960
                                                                   20080725
     CN 101836308
                          Α
                                20100915
                                            CN 2008-80100671
                                                                   20080725
                                            US 2010-670799
     US 20100193776
                          A1
                                20100805
                                                                   20100126
PRIORITY APPLN. INFO.:
                                            JP 2007-196527
                                                                A 20070727
                                            WO 2008-JP63813
                                                                TeT
                                                                   20080725
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 150:202540

AB Organic electroluminescent device comprising an anode, a cathode disposed facing the anode, and an organic layer that is sandwiched between the anode and the cathode and that includes at least a light-emitting layer are described in which the light-emitting layer comprises an electron-transporting light-emitting material, a hole-transporting host material, and an elec. inert material, and the concentration of the electron-transporting light-emitting material gradually decreases from a cathode side toward an anode side. Preferably, the concentration of the elec. inert material also gradually decreases from the cathode side toward the

anode side. T 881887-26-9

RN

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent devices with graded concns. of electron-transporting light-emitting materials in hole-transporting hosts)

881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

9

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 51 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:116715 CAPLUS

DOCUMENT NUMBER: 150:155944

TITLE: Organic electroluminescent elements with high

light-emission efficiency and excellent durability employing multiple light-emitting materials having different electron affinities and gradially changing

compositions

INVENTOR(S): Satou, Tasuku; Kinoshita, Masaru; Tobise, Manabu PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: U.S. Pat. Appl. Publ., 28 pp.

CODEN: USXXCO

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20090026936	A1	20090129	US 2008-177951	20080723
US 7847479	B2	20101207		
JP 2009055010	A	20090312	JP 2008-188629	20080722
PRIORITY APPLN. INFO.:			JP 2007-196677 A	20070727
ASSIGNMENT HISTORY FOR U	IS PATEN	T AVAILABLE	IN LSUS DISPLAY FORMAT	

AB Organic electroluminescence elements are described which comprise a

and organic electroluminescence elements are described which comprise a light-emitting layer between a pair of electrodes, where the light-emitting layer contains at least two light-emitting materials having

different Ea values and at least one host material, a concentration of a light-emitting material having a larger Ea value in the light-emitting layer gradually decreases from a cathode side toward an anode side, and a concentration of a light-emitting material having a smaller Ea value in the light-emitting layer gradually decreases from the anode side toward the

cathode side.

881887-26-9
RL: PRP (Properties); TEM (Technical or engineered material use); USES (USES)

(light-emitting layer containing; organic electroluminescent elements employing multiple light-emitting materials having different electron affinities)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

ANSWER 52 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:85882 CAPLUS

DOCUMENT NUMBER: 150:179579

TITLE: Organic electroluminescent device

INVENTOR(S): Okada, Hisashi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkvo Koho, 97pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2009016184	A	20090122	JP 2007-176762	20070704
PRIORITY APPLN. INFO.:			JP 2007-176762	20070704
AD The Control of the Control			A contract to the second second second	

AB The invention refers to an organic electroluminescent device comprising two or more luminescent units between two electrodes, wherein the intermediate connecting layer between the luminescent units, and each of the luminescent units have organic layers which contain a luminescent layer, and the light from the luminescent units combine to create white light.

864541-08-2 881887-26-9 930778-68-0 1104389-25-4

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)(3,5difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

881887-26-9 CAPLUS RN

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1phenylene-kC1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 930778-68-0 CAPLUS

CN Platinum, (3,5,9,11-tetrafluoro-7,7,18,18-tetramethyl-23,24diazapentacyclo[17.3.1.12,6.18,12.113,17]hexacosa-1(23), 2, 4, 6(26), 8, 10, 12(25), 13, 15, 17(24), 19, 21-dodecaene-25, 26-diylκC25,κC26,κN23,κN24)-, (SP-4-2)- (CA INDEX NAME)

RN 1104389-25-4 CAPLUS

CN Platinum, (14,14,29,29-tetramethyl-14H,29H-7,13:15,21-dimetheno-6,30:22,28dinitrilotetrabenzo[a,f,k,p]cyclodocosene-33,34-diylκC33,κC34,κN31,κN32)-, (SP-4-2)- (CA INDEX NAME)

ACCESSION NUMBER: 2008:1280630 CAPLUS

DOCUMENT NUMBER: 149:502651

TITLE: Organic electroluminescent display device and

patterning method

INVENTOR(S): Matsunaga, Atsushi; Nakayama, Masaya; Tanaka, Atsushi

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

Patent

English

SOURCE: PCT Int. Appl., 43pp.
CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.					KIN	D	DATE		APPLICATION NO.									
	WO	2008	1268	 83		A1 20081023									2	0080	403	
		W:	AE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
			CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
			FI.	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,
			KM.	KN.	KP.	KR.	KZ.	LA.	LC.	LK.	LR.	LS.	LT.	LU.	LY.	MA.	MD.	ME.
			MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
								SD,										
			TR.	TT.	TZ,	UA.	UG,	US,	UZ.	VC.	VN.	ZA.	ZM.	ZW				
		RW:	AT.	BE.	BG.	CH.	CY.	CZ,	DE.	DK.	EE.	ES.	FI.	FR.	GB,	GR,	HR.	HU,
								LV,										
								CI,										
			TG.	BW.	GH.	GM.	KE.	LS,	MW.	MZ.	NA.	SD.	SL.	SZ.	TZ.	UG.	ZM.	ZW.
								MD,										
	JP	2008										008-	9427	3		2	0080	331
		2009																
	EP	2135	288			A1		2009	1223		EP 2	008-	7401	54		2	0080	403
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
			IE,	IS,	IT.	LI.	LT,	LU,	LV.	MC.	MT.	NL,	NO.	PL,	PT.	RO.	SE,	SI,
			SK,															
	CN	1016	4179	4		A		2010	0203		CN 2	008-	8000	9705		2	0090	924
	US	2010	0073	268		A1		2010	0325		US 2	009-	5945	41		2	0091	002
PRIO	RIT	APP	LN.	INFO	. :						JP 2	007-	9951	6		A 2	0070	405
											WO 2	008-	TP57	053		W 2	กกลก	403

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB An organic electroluminescent display device includes a driving TFT and pixels which are formed by organic electroluminescent elements and provided in a pattern on a substrate of the TFT. The driving TFT includes at least a substrate, a gate electrode, a gate insulating film, an active layer, a source electrode, and a drain electrode; the driving TFT further includes a resistive layer between the active layer and at least one of the source electrode and the drain electrode; and the pixels are formed in a pattern by a laser transfer method. A patterning method by a laser transfer method for producing the fine pixels is also provided.

IT 864541-08-2

RL: TEM (Technical or engineered material use); USES (Uses)
(organic electroluminescent display device and patterning method)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 54 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN 2008:1188420 CAPLUS

13

ACCESSION NUMBER: DOCUMENT NUMBER: 149:435443

TITLE:

Organic electroluminescence element INVENTOR(S): Satou, Tasuku; Fukunaga, Hirofumi; Tobise, Manabu

Fujifilm Corporation, Japan PATENT ASSIGNEE(S):

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS

SOURCE: U.S. Pat. Appl. Publ., 38 pp.

CODEN: USXXCO Patent DOCUMENT TYPE:

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080241518	A1	20081002	US 2008-54147	20080324
JP 2008270729	A	20081106	JP 2008-26984	20080206
PRIORITY APPLN. INFO.:			JP 2007-80253 A	20070326
			JP 2008-26984 A	20080206

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 149:435443

Organic electroluminescent element comprising at least one organic layer including a light-emitting layer between a pair of electrodes are described in which the element includes an electron transport layer containing a phosphine oxide compound and an electron transport layer that does not contain the phosphine oxide compound between the light-emitting layer and a cathode, the electron transport layer containing the phosphine oxide compound being nearer to the cathode while the electron transport layer that does not substantially contain the phosphine oxide compound is nearer to the

light-emitting layer. 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent devices with phosphine oxide compound-containing and

phosphine oxide-compound free dual electron transport layers) RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1phenylene-kCl)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 55 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2008:1185550 CAPLUS DOCUMENT NUMBER: 149:435442

TITLE: Organic electroluminescent devices with layers

including deuterated carbazole derivatives and

platinum complexes
INVENTOR(S): Takeda, Akira

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.			KIN		DATE		APPLICATION NO.										
WO	2008	1178	89		A1	A1 20081002										0080	326
	W:	AE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
		FI.	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,
		KM.	KN.	KP.	KR.	KZ.	LA.	LC.	LK.	LR.	LS,	LT.	LU.	LY.	MA.	MD,	ME.
											NI,						
											SL,						
											ZA,					,	
	RW:										ES,			GB,	GR.	HR.	HU.
											NO.						
											GO,						
											SD,						
								RU,			,	,	,	,	,	,	,
JP	2009										008-	7473	0		2	0080	321
	2129										008-						
	R:	AT.	BE.	BG.							ES,						
											NL,						
		SK,		,		,	,		,	,				,		,	,
KR	2010				A		2010	0210		KR 2	009-	7020	119		2	0080	326
US	2010	0084	967		A1		2010	0408		IIS 2	009-	5326	41		2	0090	923
	1016						2010				008-					0090	
RIORIT											007-				A 2		
											008-				TO 2		
											008-					0080	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 149:435442; MARPAT 149:435442

GI

AB Organic electroluminescent devices comprising a pair of electrodes; and at least one organic layer between the pair of electrodes, the at least one organic

layer including a light-emitting layer are described in which the organic layer(s) contain a compound are described by the general formula I (R1-8 = independently selected H or a substituent, and contiguous groups of R1-8 may be bonded to each other to form a condensed ring; R9 = alkyl, alkenyl, aryl, heteroaryl, or silyl, and each group may be substituted with substituent; and ≥ 1 R1-9 = deuterium or a substituent containing deuterium) and the light-emitting layer contains a phosphorescent platinum complex having a tetradentate ligand.

864541-08-2 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent devices with layers including deuterated carbazole derivs. and platinum complexes)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

10/578,039

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 3 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 56 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN 2008:674480 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: 149:41393

TITLE: Organic electroluminescent device containing

indole-based light-emitting layer INVENTOR(S): Igarashi, Tatsuya; Yagi, Kazunari Fujifilm Corporation, Japan

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 101pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT NO. KIND DATE APPLICATION NO. DATE	_		
WO 2008066192 A1 20080605 WO 2007-JP73274 2007112	20071127		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, C	Α,		
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, F	I,		
GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, K			
KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, M	Э,		
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, P			
RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, T	R,		
TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, I			
IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, B			
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, E			
GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, A	Ζ,		
BY, KG, KZ, MD, RU, TJ, TM			
JP 2008160087 A 20080710 JP 2007-303467 2007112			
EP 2102308 A1 20090923 EP 2007-849977 2007112			
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, I			
IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, T US 20100026174 A1 20100204 US 2009-516259 2009052			
WO 2007-JP73274 W 2007112 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT	/		
OTHER SOURCE(S): MARPAT 149:41393			

Ι

- AB An organic electroluminescent device is described comprising a pair of electrodes; and at least one organic layer between the pair of electrodes, the at least one organic layer including a light-emitting layer, wherein the at least one organic layer includes at least one layer containing an indole derivative represented by general formula I, and the light-emitting layer includes a platinum complex phosphorescent material having a tetradentate ligand, wherein R101-R107 each independently represents a hydrogen atom or a substituent, provided that R102-R103 are not bonded to each other to form an aromatic condensed ring.
- IT 808111-97-9 864541-08-2 881887-26-9
 RL: TEM (Technical or engineered material use); USES (Uses)
 (light emitting layer; organic electroluminescent device containing indole-based light-emitting enhancer)
- RN 808111-97-9 CAPLUS CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)-2,1-phenylene-KCll-, (SP-4-2)- (CA INDEX NAME)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)(3,5-difluoro-2,1-phenylene-kC)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)(4-cyano-2,1phenylene-KC1)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT:

THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 57 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER:

2008:673873 CAPLUS

DOCUMENT NUMBER: 149:66137

TITLE: Organic electroluminescent device and indole derivative

Igarashi, Tatsuya; Yagi, Kazunari Fujifilm Corporation, Japan

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 54pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PA:	ENT :	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE		
						-												
WO	2008	0661	95		A1		2008	0605	1	WO 2	007-	JP73:	278		2	0071	127	
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,	
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,	
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,	KM,	
		KN.	KP.	KR.	KZ.	LA.	LC.	LK.	LR.	LS.	LT.	LII.	LY.	MA.	MD.	ME.	MG.	

OTHER SOURCE(S):

GT

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MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT,
             RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR,
             TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
             GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
     JP 2009076835
                                            JP 2007-303466
                          Α
                                20090409
                                                                   20071122
     EP 2094810
                          A1
                                20090902
                                            EP 2007-849981
            AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR
     US 20100066243
                         A1
                                20100318
                                            US 2009-516495
PRIORITY APPLN. INFO.:
                                            JP 2006-318773
                                                                  20061127
                                            JP 2007-221520
                                                                A 20070828
                                                                W 20071127
                                            WO 2007-JP73278
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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MARPAT 149:66137

R106 R101 R105 N (R107) n102

AB An organic electroluminescent device is described comprising a pair of electrodes; and at least one organic layer between the pair of electrodes, the at least one organic layer including a light-emitting layer containing a light-emitting material, wherein the at least one organic layer includes at least one layer containing an indole derivative represented by the general

Ι

formula

I wherein R102, R103, R104, R105 and R106 each independently represents a hydrogen atom or a substituent; R101 represents a substituent linking via a carbon atom; R101 and R106 may be bonded to each other to form a ring; R107 represents a substituent; n101 represents 1 or 2; and n102 represents an integer of from 0 to 5, provided that $n101 + n102 \le 6$.

IT 808111-97-9 864541-08-2 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses)

(phosphorescent material; organic electroluminescent device having indole derivative organic layer)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1-phenylene-κC]]-, (SP-4-2)- (CA INDEX NAME)

10/578,039

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT:

1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 58 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2008:550939 CAPLUS

DOCUMENT NUMBER: 148:506352

TITLE: Organic electroluminescent (EL) elements with

excellent durability and efficiency and white-emitting

EL devices using them

INVENTOR(S): Igarashi, Tatsuya

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 70pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DA	ATE
JP 2008108617	A	20080508	JP 2006-291334 20	0061026
PRIORITY APPLN. INFO.:			JP 2006-291334 20	0061026
ORDER CONTOR (C)	143 DD 3 m	140.506353		

OTHER SOURCE(S): MARPAT 148:506352

The elements have EL layers (A) containing metal complex hosts and phosphors with condensed aromatic ligands and EL layers (B) containing phosphors of Pt complexes with tetradentate ligands.

864541-08-2

RL: TEM (Technical or engineered material use); USES (Uses)

(phosphor; white-emitting EL devices containing 2 emission layers with good durability and efficiency)

864541-08-2 CAPLUS RN

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5difluoro-2,1-phenylene-kC)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 59 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN 2008:549305 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

148:549261

TITLE: Organic electroluminescent devices containing prescribed carbazole compounds and tetradentate

phosphorescent complexes

INVENTOR(S): Takeda, Rei

PATENT ASSIGNEE (S): Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 35pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008109103	A	20080508	JP 2007-239609	20070914
PRIORITY APPLN. INFO.:			JP 2006-263415 A	20060927
OTHER SOURCE(S):	MARPAT	148:549261		

AB The devices, showing improved luminescent efficiency and long service life, have emitting layers containing carbazole derivs. I [Q1-Q4 = C, Si; R0 = H, alkyl, aryl, C-connected heteroaryl; R1 = H; R2-R15 = H, substituent; Z1-Z12 = alkyl, (hetero)aryl] and tetradentate ligand-equipped phosphorescent complexes.

Τ

- IT 864541-08-2
 - RL: TEM (Technical or engineered material use); USES (USes) (emitting layers; organic electroluminescent devices containing prescribed carbazole compds. and tetradentate phosphorescent complexes)
- RN 864541-08-2 CAPLUS
- CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 60 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2008:419446 CAPLUS

DOCUMENT NUMBER: 148:437513

TITLE: Organic electroluminescent element

INVENTOR(S): Satou, Tasuku

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 26pp.

CODEN: USXXCO DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
US 20080079358	A1	20080403	US 2007-902459		20070921
JP 2008109085	A	20080508	JP 2007-197716		20070730
PRIORITY APPLN. INFO.:			JP 2006-269485	A	20060929
			JP 2007-197716	A	20070730

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB An organic electroluminescent element includes at least one organic layer

AB An organic electroluminescent element includes at least one organic layer including a light-emitting layer between a pair of electrodes, wherein the light-emitting layer includes a metal complex having a tri-dentate or higher multi-dentate ligand, and a metal-free compound capable of giving a three or higher coordination with the same metal element as a central metal of the metal complex is provided. An organic electroluminescent element having a high light emitting efficiency and excellent durability

is provided. IT 808111-97-9

RL: TEM (Technical or engineered material use); USES (Uses) (metal complex; organic electroluminescent element containing)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1-phenylene-κC]]-, (SP-4-2)- (CA INDEX NAME)

Me Me

L8 ANSWER 61 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:1421312 CAPLUS

DOCUMENT NUMBER: 148:65687

TITLE: Organic electroluminescent device

INVENTOR(S): Murakami, Takeshi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 35pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

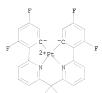
FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007324309	A	20071213	JP 2006-151705	20060531
PRIORITY APPLN. INFO.:			JP 2006-151705	20060531

OTHER SOURCE(S):

MARPAT 148:65687

- AB The invention relates to an organic electroluminescent device, comprising a tetradentate ligand-containing metal complex in which, at least, one linking group connecting between coordinating groups to the center metal, contains a specific alkyl group in order to prevent the mol. association that may reduce the luminescent efficiency.
- IT 959838-95-0 959838-96-1 959838-97-2
 - RL: TEM (Technical or engineered material use); USES (Uses)
 (organic electroluminescent device)
- RN 959838-95-0 CAPLUS
- CN Platinum, [[3-methyl-1-(2-methylpropyl)butylidene]bis[(6,2-pyridinediyl-ki)(3,5-difluoro-2,1-phenylene-kCl)]]-, (SP-4-2)- (CA INDEX NAME)



i-Bu Bu-i

- RN 959838-96-1 CAPLUS
- CN Platinum, [[3-methyl-1-(2-methylpropyl)butylidene]bis[(6,2-pyridinediyl-KN)(4-cvano-2,1-phenylene-KC1)]]-, (SP-4-2)- (CA INDEX NAME)

- RN 959838-97-2 CAPLUS
- CN Platinum, [(1,3-dimethylbutylidene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κCl)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 62 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:435308 CAPLUS

DOCUMENT NUMBER: 146:431504

TITLE: Organic field emission element made from multidentate

metal complex

INVENTOR(S): Kitamura, Yoshitaka

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 149pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT INFORMATION:

	JP 2007103493 A	20070419	JP 2005-288903	20050930
PRIO	RITY APPLN. INFO.:		JP 2005-288903	20050930
AB	Disclosed is an organic	field emission	element comprising	≥2 light
	emitting units disposed	between a pair	of electrodes and i	ntermediate
	contact layers disposed			
	≥2 light emitting units	have independe	ntly an organic comm	ound laver

including a light emitting layer and containing a metal complex with tri- or

APPLICATION NO. DATE

IT 808111-97-9

higher-dentate.

RL: TEM (Technical or engineered material use); USES (Uses)
(Organic field emission element made from multidentate metal complex)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1-phenylene-κC]]-, (SP-4-2)- (CA INDEX NAME)

KIND DATE

Me Me

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L8 ANSWER 63 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:385414 CAPLUS

DOCUMENT NUMBER: 146:368522

TITLE: Organic electroluminescent element INVENTOR(S): Sano, Satoshi; Igarashi, Tatsuya PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: U.S. Pat. Appl. Publ., 22pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070077453	A1	20070405	US 2006-542550	20061004
JP 2007129206	A	20070524	JP 2006-271604	20061003
PRIORITY APPLN. INFO.:			JP 2005-291145	A 20051004
ACCTONNENT UTCHOOSE DOD	TIC DIMENI	3113 77 3 57 5	THE FOUR DECREES THE HODIN	13. FB

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 146:368522

AB Organic electroluminescent elements are described which comprise a pair of electrodes; and at least one organic layer comprising a light-emiting layer between the pair of electrodes, where the at least one organic layer comprises at least one of compds. represented by formula (R1)m-(R1)n, where R1 represents a substituent; m represents an integer of 2 or more; n represents an integer of 1 or more; and A1 represents a group selected from the group consisting of specific compds, with the provisc that when m or n is 2 or more, a plurality of R1's or A1's may be the same or different.

IT 808111-97-9

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent elements using)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1-phenylene-κC]]-, (SP-4-2)- (CA INDEX NAME)

Me Me

L8 ANSWER 64 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2007:383084 CAPLUS

DOCUMENT NUMBER: 146:390149

TITLE:

Organic electroluminescent devices employing a polymer comprising a metal complex containing a tri- or

higher-dentate ligand INVENTOR(S): Okada, Hisashi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: U.S. Pat. Appl. Publ., 126pp.

CODEN: USXXCO DOCUMENT TYPE: Patent LANGUAGE: English

demonstrated and characterized.

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070075311	A1	20070405	US 2006-529595	20060929
JP 2007123862	A	20070517	JP 2006-263431	20060927
DDTODTTV ADDIN TNEO .			TD 2005_299931 3	20050030

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 146:390149 AB Organic electroluminescent devices are described which comprise an organic compound layer provided between a pair of electrodes, which comprises a polymer comprising a metal complex containing a tri- or higher-dentate ligand in the polymer mol. At least one of the ligands is preferably a chain. The metal complex preferably contains a transition metal ion or a rare earth metal ion. The metal complex preferably contains a nitrogen atom in its complex structure. Further, the polymer preferably contains the metal complex in its main chain or its side chain. Thus, green-emitting devices employing platinum organometallic polymers as luminescent materials were

932397-76-7 932397-77-8 RL: PRP (Properties); TEM (Technical or engineered material use); USES

(Uses) (luminescent layer; organic electroluminescent devices employing polymer comprising metal complex containing tri- or higher-dentate ligand)

932397-76-7 CAPLUS Platinum, [[[4-[(2-methyl-1-oxo-2-propen-1-

yl) oxy]phenyl]phenylmethylene]bis[(6,2-pyridinediyl-κN)-2,1phenylene-κCl]]-, (SP-4-2)-, homopolymer (CA INDEX NAME)

CM 1

CRN 932397-75-6

10/578,039

CMF C39 H28 N2 O2 Pt CCI CCS

RN 932397-77-8 CAPLUS

CN Platinum, [[[4-[(2-methyl-1-oxo-2-propen-1-yl) oxy]phenyl]phenylmethylene]bis[(6,2-pyridinediyl-kN)-2,1-phenylene-kCl]]-, (SP-4-2)-, polymer with 9-ethenyl-9H-carbazole (CA INDEX NAME)

CM 1

CRN 932397-75-6

CMF C39 H28 N2 O2 Pt

CCI CCS

CM 2

CRN 1484-13-5 CMF C14 H11 N

L8 ANSWER 65 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:380659 CAPLUS

DOCUMENT NUMBER: 146:390910

TITLE: Organic electroluminescent device and method for

finely patterning it by laser ablation

KIND DATE

INVENTOR(S): Kitamura, Yoshitaka

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 144pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent.

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: PATENT NO.

RN

	JP 2007087667	A	20070405	JP	2005-272811	20050920
PRIO	RITY APPLN. INFO.:			JΡ	2005-272811	20050920
OTHE	R SOURCE(S):	MARPAT	146:390910			
AB	The device (for dis	play) h	as, between	ар	air of electrode	s, ≥1 of
	light-emitting laye	rs cont	aining metal	co	mplexes bearing	≥3-dentate
	ligands and is patt	erned b	y laser abla	tio	n.	
IT	808111-97-9 864	541-08-	2			
	RL: MOA (Modifier o	r addit	ive use); PE	P (Physical, engine	ering or chemical
	process); PROC (Pro	cess);	USES (Uses)			
	(dopants, light-	emittin	g layers; me	tho	d for finely pat	terning organic
	electroluminesce	nt devi	ce by laser	abl	ation)	
BN	808111-97-9 CAPLUS		-			

APPLICATION NO. DATE

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1phenylene-kC]]-, (SP-4-2)- (CA INDEX NAME)



RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediy1-κN)(3,5-

difluoro-2,1-phenvlene-κC)||-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 66 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:356751 CAPLUS

DOCUMENT NUMBER: 146:390112

TITLE: Organic electroluminescent devices with high emission

efficiency and excellent durability and their manufacture by liquid-phase method

INVENTOR(S): Yamazaki, Kazuki

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 143pp. SOURCE:

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007080677	A	20070329	JP 2005-267249	20050914
PRIORITY APPLN. INFO.:			JP 2005-267249	20050914
OTHER SOURCE(S).	MARPAT	146.390112		

- The devices have light-emitting layers manufactured by liquid-phase method (coating or printing method, preferably) using ≥1 metal complexes with ≥3-dentate ligands.
- IT 808111-97-9
 - RL: TEM (Technical or engineered material use); USES (Uses) (light-emitting layer; manufacture of organic EL devices with high emission efficiency and durability by coating or printing method using multidentate ligand-metal complexes)
- RN 808111-97-9 CAPLUS
- CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1phenylene-kC]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 67 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:356713 CAPLUS

DOCUMENT NUMBER: 146:390111

TITLE: Organic electroluminescent device INVENTOR(S): Hasegawa, Kazuhiro

KIND DATE

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 144pp.

CODEN: JKXXAF

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO.

JP 2007080593	A	20070329	JP 2005-264374	20050912
PRIORITY APPLN. INFO.:			JP 2005-264374	20050912
AB The invention refer	s to an	organic e	lectroluminescent dev	ice comprising an at
			two electrodes, and a	
resonating the ligh	t emitt	ed from th	e luminescent layer,	and the
luminescent layer o	ontains	, as lumin	escent material, a me	tal complex
having tri- or high	er dent	ate ligand	s.	

APPLICATION NO.

DATE

I 930778-68-0 RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 930778-68-0 CAPLUS

CN Platinum, (3,5,9,11-tetrafluoro-7,7,18,18-tetramethyl-23,24-diazapentacyclo[17,3,1.12,6.18,12.113,17]hexacosa-1(23),2,4,6(26),8,10,12(25),13,15,17(24),19,21-dodecaene-25,26-diyl-kC25,kC26,kN23,kN24)-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 68 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:286937 CAPLUS

DOCUMENT NUMBER: 146:347119

TITLE: Organic electroluminescent device and complex compound

INVENTOR(S): Takeda, Akira; Igarashi, Tatsuya
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: U.S. Pat. Appl. Publ., 24pp.

CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070059552	A1	20070315	US 2006-518355	20060911
JP 2007073891	A	20070322	JP 2005-262305	20050909
PRIORITY APPLN. INFO.:			JP 2005-262305 A	20050909
ASSIGNMENT HISTORY FOR	US PATEN	IT AVAILABLE	IN LSUS DISPLAY FORMAT	
OTHER SOURCE(S):	MARPAT	146:347119		
GI				

AR An organic electroluminescent device is described comprising a pair of electrodes; and at least one organic layer between the pair of electrode, the at least one organic layer including a light-emitting layer, wherein the at least one organic layer contains at least one compound represented by the general formula I (where M = a metal ion; Oll, Ol2, Ol3, Ol4 = (independently) atom group coordinating with M; L10, L11, L12, L13 = (independently) a single bond, a double bond or a linking group; lines between the M and each of Q1 group represent one of a covalent bond, an ionic bond, and a coordinate bond; n10 = 0, 1, and when n10=0, Q13 and Q14 do not bond to each other; mli (i = 1, 2, 3, 4) (independently) = integer of 0 or more, and at least one of mli is 1 or more; Arli = (independently) an aryl group or a heteroaryl group; and R1i = (independently) hydrogen atom or a substituent group).

929034-41-3P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(organic electroluminescent device having platinum complex as phosphorescent laver)

929034-41-3 CAPLUS RN

CN Platinum, [(1-methylethylidene)bis[[4-(diphenylamino)-6.2-pyridinediylκN](3,5-difluoro-2,1-phenylene-κC1)]]-, (SP-4-2)- (CA INDEX NAME)

ANSWER 69 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:286933 CAPLUS

DOCUMENT NUMBER: 146:325836

TITLE: Composition for organic electroluminescent element, method for manufacturing organic electroluminescent

element, and organic electroluminescent element

INVENTOR(S): Yamazaki, Kazuki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: U.S. Pat. Appl. Publ., 126pp.

CODEN: USXXCO DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070059551	A1	20070315	US 2006-518303	20060911

JP 2007110067 A 20070426 JP 2006-47240 20060223
PRIORITY APPLN. INFO: JP 2005-267556 A 20050914
JP 2005-267557 A 20050914
JP 2006-47240 A 20060223

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 146:325836

 ${\tt AB} - {\tt A}$ composition for an organic electroluminescent element used for forming a pattern

by an ink jet method is described comprising at least one metal complex having a tridentate or higher-dentate ligand. A method of fabricating an organic electroluminescent element including forming an organic compound layer

by discharging the composition for an organic electroluminescent element in a pattern

with an ink jet apparatus, is also described entailing using a transfer material having an organic compound layer containing a metal complex having a tridentate or higher-dentate ligand, and organic electroluminescent elements manufactured by these methods:

IT 808111-97-9

RL: TEM (Technical or engineered material use); USES (Uses)

(composition for organic electroluminescent element for forming pattern by ink

jet method)

RN 808111-97-9 CAPLUS CN Platinum, [(1-methy

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1-phenylene-κC]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 70 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:172434 CAPLUS

DOCUMENT NUMBER: 146:238960

TITLE: Organic electroluminescent device with high emission efficiency, good drive durability, and low-voltage

drive property

INVENTOR(S): Okada, Hisashi; Nishida, Nobuhiro
PATENT ASSIGNEE(S): Fujifilm Holdings Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 44pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007042875	A	20070215	JP 2005-225568	20050803

PRIORITY APPLN. INFO.: JP 2005-225568 20050803

The organic EL device contains, between a pair of electrode, a hole-transporting layer containing ≥1 kinds of hole-transporting materials, a light-emitting layer containing ≥1 kinds of light-emitting dopants and a plurality of host compds., an electron-transporting layer containing ≥1 kinds of electron-transporting substances, wherein among the host compds., ≥1 kinds comprise hole-transporting host compds. and ≥1 kinds of electron-transporting host compds., between the hole-transporting layer and the light-emitting layer is provided a hole-transporting intermediate layer consisting of the same substance as that of the hole-transporting host compds., and/or between the electron-transporting layer is provided an electron-transporting intermediate layer consisting of the same substance as that of the electron-transporting host compds.

808111-97-9 864541-08-2 RL: MOA (Modifier or additive use); USES (Uses) (light-emitting dopant; organic EL device with high emission efficiency, good drive durability, and low-voltage drive property)

808111-97-9 CAPLUS CN Platinum, ((1-methylethylidene)bis((6,2-pyridinediyl-KN)-2,1phenylene-kCll-, (SP-4-2)- (CA INDEX NAME)

RN

RN 864541-08-2 CAPLUS CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)(3,5difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

ACCESSION NUMBER: 2007:63444 CAPLUS

DOCUMENT NUMBER: 146:151494

TITLE: Organic electroluminescent device

INVENTOR(S): Nariyuki, Fumito

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 23pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070015004	A1	20070118	US 2006-444422	20060601
JP 2007019471	A	20070125	JP 2006-132548	20060511
PRIORITY APPLN. INFO.:			JP 2005-166817 A	20050607
ASSIGNMENT HISTORY FOR	US PATEN	T AVAILABLE	IN LSUS DISPLAY FORMAT	
ORUED COURSELOS	MADDAM	246.252404		

OTHER SOURCE(S): MARPAT 146:151494

The invention provides an organic electroluminescent device having at least a light-emitting layer containing a light-emitting material and a host material, a hole injection-promoting layer, and a hole-transporting layer containing a hole-transporting material in this order between a pair of electrodes, in which the hole injection-promoting layer contains a hole-transporting material and has a thickness of 0.1 nm to 0.3 nm, and the relation player player. The player contains a hole-transporting material of the hole-transporting material of the hole-transporting layer, 1p2 is defined as the ionization potential of the hole injection-promoting layer, and 1p3 is defined as the ionization potential of the hole injection-promoting layer, and 1p3 is defined as the ionization potential of the hole transporting material of the hole injection-promoting layer, and 1p3 is defined as the ionization potential of the host material. Accordingly, the invention provides an electroluminescent device excellent in both light emitting efficiency and operation durability.

IT 864541-08-2

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(light-emitting layer guest; organic electroluminescent device)

RN 864541-08-2 CAPLUS
CN Platinum, [(1-methyleth

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 72 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2006:1283684 CAPLUS DOCUMENT NUMBER: 146:53463

TITLE: Organic electroluminescent devices

INVENTOR(S): Kinoshita, Ikuo; Igarashi, Tatsuya; Murakami, Takeshi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 26pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2006332620	A	20061207	JP 2006-119523	20060424
	US 20060286406	A1	20061221	US 2006-410000	20060425
	US 7758971	B2	20100720		
TO	DITY ADDING THEO.			TD 2005-126734	7 20050425

PRIORITY APPLN. INFO.: JP 2005-126734 A 20050429
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 146:53463

AB The devices contain layers containing the metal complexes with

 \geq 3-coordinated ligands between light-emitting layers and cathodes.

The devices have improved light emission efficiency. 913699-15-7 913699-16-8 916427-56-0

916427-57-1

RL: TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent devices containing metal complexes with ligands)

RN 913699-15-7 CAPLUS

CN Palladium, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

RN 913699-16-8 CAPLUS

CN Platinum, [(diphenylmethylene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 916427-56-0 CAPLUS

CN Platinum, [(diphenylmethylene)bis[(6,2-pyridinediyl-kN)-2,1phenylene-KC1]]-, (SP-4-2)- (CA INDEX NAME)

916427-57-1 CAPLUS RN

CN Palladium, [(diphenylmethylene)bis[(6,2-pyridinediyl- κ N)-2,1phenylene-κC1]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT:

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L8 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

ANSWER 73 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN 2006:1147252 CAPLUS 145:480097

Organic electroluminescent devices employing a metal complex having a multidentate ligand as a host

material

INVENTOR(S): Igarashi, Tatsuya; Murakami, Takeshi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: PCT Int. Appl., 68pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.			KIN	D	DATE APPLICATION NO.			DATE										
	WO	2006	1152	99		A1	_	2006	1102		WO 2	006-	JP30	9137		2	0060	425
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN.	co.	CR.	CU.	CZ.	DE.	DK,	DM.	DZ.	EC.	EE.	EG.	ES.	FI.	GB.	GD.
			GE.	GH.	GM.	HR.	HU.	ID.	IL,	IN.	IS.	KE.	KG.	KM.	KN.	KP.	KR.	KZ.
									LV.									
									PG,									
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					ZM.		10,	1117	1117	1117	11,	10,	011,	00,	00,	02,	,	,
		DW.					CV	C7	DE,	DK	FF	ES	FT	FD	CB	CP	нп	TE
		1411.							NL,									
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									SD,	SL,	SZ,	12,	UG,	ZM,	ZW,	AM,	AZ,	вı,
						RU,										_		
		2006																
	EP	1874	893			A1		2008	0109		EP 2	006-	7459	87		2	0060	425
		R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
			IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
	US	2009	0039	768		A1		2009	0212		US 2	007-	9124	70		2	0071	024
PRIO	RIT	Y APP	LN.	INFO	. :						JP 2	005-	1267	33		A 2	0050	425
																	0060	
	WO 2006-JP309137 W 20060425																	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 145:480097

AB Organic electroluminescent devices are described which comprise a pair of electrodes; and at least one organic compound layer including a light emitting layer between the pair of electrodes, where the light emitting layer contains a host material and a light emitting material, and where the host material contains a metal complex having a tridentate or more ligand.

T 913699-16-8 913699-17-9

RL: DEV (Device component use); PRP (Properties); USES (Uses) (organic electroluminescent devices employing metal complex having multidentate liqand as host material)

RN 913699-16-8 CAPLUS

CN Platinum, [(diphenylmethylene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

- RN 913699-17-9 CAPLUS
- CN Platinum, bis[μ-1([2,2'-bipyridine]-6,6'-diylkN1:kN1')bis(3,5-difluoro-2,1-phenylene-κC)]]di- (9CI) (CA INDEX NAME)

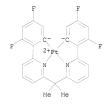
- IT 913699-15-7P
 - RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses) (organic electroluminescent devices employing metal complex having multidentate ligand as host material)
- RN 913699-15-7 CAPLUS
- CN Palladium, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)(3,5-difluoro-2,1-phenylene-KC)]]-, (SP-4-2)- (CA INDEX NAME)

IT 864541-08-2

RL: RCT (Reactant); RACT (Reactant or reagent) (organic electroluminescent devices employing metal complex having multidentate ligand prepared using)

864541-08-2 CAPLUS RN

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)(3,5difluoro-2,1-phenylene-kC)]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT:

RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 74 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:706549 CAPLUS

DOCUMENT NUMBER: 145:155758

TITLE:

Organic electroluminescent devices having metal complexes and host materials in emitter layers INVENTOR(S):

Tsukahara, Jiro; Ise, Toshihiro; Uchida, Osamu; Nakamura, Akio

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 27 pp. SOURCE: CODEN: JKXXAF

DOCUMENT TYPE: Pat.ent. LANGUAGE:

Japanese FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2006190718 A 20060720 JP 2004-382034 20041228 PRIORITY APPLN. INFO.: JP 2004-382034 20041228

MARPAT 145:155758 OTHER SOURCE(S):

The devices have planar 4-coordinate metal complexes and host materials composed of nuclear components and ligands chosen from N-containing heterocyclic groups, cyano groups, and isocyano groups for coordination with the metal complexes in emitter layers between pairs of electrodes. The devices emit light with maximum wavelength ≤500 nm.

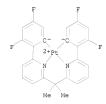
864541-08-2

RL: DEV (Device component use); USES (Uses)

(organic electroluminescent devices having metal complexes and host materials in emitter lavers)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)(3,5difluoro-2,1-phenylene-KC)]]-, (SP-4-2)- (CA INDEX NAME)



OS.CITING REF COUNT: THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD 1 (1 CITINGS)

L8 ANSWER 75 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2006:604017 CAPLUS

DOCUMENT NUMBER: 145:73027

Organic electroluminescent device TITLE:

INVENTOR(S): Okada, Hisashi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 164 pp. SOURCE: CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND APPLICATION NO. DATE DATE JP 2006165526 20060622 JP 2005-325122 20051109 A US 20060222887 US 2005-269816 A1 20061005 20051109 US 7754346 B2 20100713 A 20041110

PRIORITY APPLN. INFO.: JP 2004-326225 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 145:73027

The invention relates to an organic electroluminescent device, providing a low voltage operation, enhanced luminescent characteristics, and good durability, comprising an organic layer, including an active layer, formed between a pair of electrodes, wherein the active layer comprises a

phosphorescent metal complex with a tri- or higher dentate ligand doped in ≥ 2 host compds.

864541-08-2

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(organic electroluminescent device)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 76 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:603049 CAPLUS

DOCUMENT NUMBER: 145:73023

TITLE: Organic electroluminescence device and production

method

INVENTOR(S): Yamazaki, Kazuki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 161 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PARTIE ACC. NON. COOKI.

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006164948	A	20060622	JP 2005-268950	20050915
RIORITY APPLN. INFO.:			JP 2004-329415 A	20041112

OTHER SOURCE(S): MARPAT 145:73023

AB The invention refers to an organic electroluminescence device comprising an organic layer between two electrodes, wherein the organic layer is formed by vapor deposition of a metal complex with a tri- or higher dentate ligand, and the vapor deposition process is repeated at least twice without switching the metal complex.

T 864541-08-2

RL: DEV (Device component use); USES (Uses)

(organic electroluminescence device and production method)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 77 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:516257 CAPLUS

DOCUMENT NUMBER: 145:36978

TITLE: Organic electroluminescent devices containing metal complexes having more than tridentate ligands

INVENTOR(S): Ogasawara, Atsushi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 152 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006140219	A	20060601	JP 2004-326658	20041110
US 20060141285	A1	20060629	US 2005-269698	20051109
PRIORITY APPLN. INFO.:			JP 2004-326658 A	20041110
ASSIGNMENT HISTORY FOR	US PATEN	T AVAILABLE	IN LSUS DISPLAY FORMAT	
OTHER SOURCE(S):	MARPAT	145:36978		
GI				



AB The devices have organic layers including emitting layers and contain metal complexes having 23-dentate ligands and SiRIIRIZRI3RI4 [R11-R14 = H, substituent, including (hetero) aryl group] in one or more of the organic layers. The complexes may be represented by I [M11 = metal; L11-L15 = ligand; Y11-Y13 = bridging group, single bond, double bond; n11 = 0-4]. The devices exhibit high luminance and longer half life of the same.

10/578.039

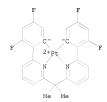
ΙT 864541-08-2

RL: DEV (Device component use); USES (Uses)

(organic electroluminescent devices containing metal complexes having more-than-tridentate ligands and substituted silane compds.)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)(3,5difluoro-2,1-phenvlene-kC)||-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 78 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:516156 CAPLUS

DOCUMENT NUMBER: 145:17464

Vapor phase deposition of organic layers of organic EL TITLE:

device, organic EL device containing the layers, and

manufacture of the organic EL device

INVENTOR(S): Yamazaki, Kazuki PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 149 pp.

CODEN: JKXXAF

т

DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006140059	A	20060601	JP 2004-329416	20041112
PRIORITY APPLN. INFO.:			JP 2004-329416	20041112
OTHER SOURCE(S):	MARPAT	145:17464		

AB $\;$ In the preparation of organic layers of organic EL device containing ≥ 1 organic

layers between a pair of electrodes, the process involves (i) degassing of evaporative materials containing ≥1 metal complexes with ≥3 ligands and (ii) heating of the evaporative materials and their deposition. Preferably, the metal complexes are represented by the general formula I (M11 = metal ion, preferably ion of Pt, Ir, Re, Pd, Rh, Ru, or Cu; L11-L15 = ligands which coordinate with M11; no more atom. groups exist in L11-L14 to form cyclic ligands; L15 will not bond with L11 and L14 both to form cyclic ligand; Y11-Y13 = linking group, single bond, double bond; when Y11, Y12, or Y13 are linking group, L11 and Y12, Y12 and L12, L12 and Y11, Y11 and L13, L13 and Y13, and Y13 and L14 show single bond or double bond independently; n11 = 0-4).

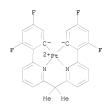
IT 864541-08-2

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(degassing and vapor phase deposition of metal complexes for preparation of organic layers of EL device)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)(3,5-difluoro-2,1-phenylene-kC)]]-, (SP-4-2)- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

L8 ANSWER 79 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:469966 CAPLUS

DOCUMENT NUMBER: 144:477361

TITLE: Organic electroluminescent device with high driving durability and defined ionization potential

relationship among hole-transport and luminescent layers

INVENTOR(S): Kitamura, Yoshitaka

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 123 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 20060105202 A1 20060518 US 2005-272763 20051115 JP 2006173588 A 20060629 JP 2005-333096 20051117 PRIORITY APPLN. INFO:: JP 2004-333263 A 20041117 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 144:477361 A first aspect of the invention is an organic electroluminescent device that includes a plurality of organic compound layers between a pair of electrodes. The plurality of organic compound layers include a luminescent layer and two or more hole-transporting layers. The hole-transporting layers include a layer adjacent to the luminescent layer. The luminescent layer contains a host material and a luminescent material. The luminescent material is a metal complex containing a tri- or higher-dentate ligand. When the ionization potential of the luminescent layer is designated as IpO, the ionization potential of the hole-transporting layer adjacent to the luminescent layer among the hole-transporting layers is designated as Ipl, and the ionization potential of the n-th hole-transporting layer from the luminescent layer among the hole-transporting layers is designated as IPn, these values satisfy the relationship represented by the following formula (1). In formula (1) n is an integer of 2 or more. Ip0>Ip1>Ip2> . . . >Ipn-1>Ipn formula (1). Thus, if the durability (defined as the time t0.5 necessary for a decrease in luminance from an initial value of 300 cd/m2 to 150 cd/m2) of the comparative device comprising ITO (0.5 mm)/NPD hole-transport layer (40 nm)/mCP (95% by weight) + BPM-1 (5% by weight) luminescent layer [35 nm; where mCP = m-dicarbazolylbenzene, BPM-1 = [2,2-bis[6-(4,6-difluorophenyl-κ-C2)-2pyridyl|propane|platinum(II)|/BAlg electron-transporting layer (45 nm)/Al cathode (100 nm) is defined as standard, then the device of the invention comprising CuPc 1st hole-transport layer (10 nm)/NPD 2nd hole-transport layer (25 nm)/HTM-1 3rd hole-transport layer [5 nm, where HTM-1 = diphenylbis[4-(tribenzazepinyl)phenyl]silane]//mCP (95% by weight) + BPM-1 (5% by weight) luminescent layer (35 nm)/BAlq 1st electron-transport layer (5 nm)/Alq 2nd electron-transport layer (40 nm) exhibited a durability

808111-97-9 864541-08-2

relative to the standard of \geq 3.5.

RL: DEV (Device component use); MOA (Modifier or additive use); PRP (Properties); USES (Uses) (dopant in mixed luminescent layer; organic electroluminescent device with

(dopant in mixed luminescent layer; organic electroluminescent device with high driving durability and defined ionization potential relationship among hole-transport and luminescent layers)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1-phenylene-κC]]-, (SP-4-2)- (CA INDEX NAME)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L8 ANSWER 80 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:446105 CAPLUS

DOCUMENT NUMBER: 144:442426

TITLE: Organic electroluminescent devices employing heterocyclic compounds and metal complexes with

multidentate ligands

INVENTOR(S): Ogasawara, Jun

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: U.S. Pat. Appl. Publ., 113 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060099450	A1	20060511	US 2005-268650	20051108
JP 2006140218	A	20060601	JP 2004-326657	20041110
PRIORITY APPLN. INFO.:			JP 2004-326657 A	20041110
ASSIGNMENT HISTORY FOR	US PATEN	T AVAILABLE	IN LSUS DISPLAY FORMAT	
OTHER SOURCE(S):	MARPAT	144:442426		

AB Organic electroluminescent devices comprising ≥1 organic layer between a pair of electrodes are described in which the organic layers include a luminescent layer, ≥1 of the organic layers comprises ≥1 metal complex containing a tri- or higher-dentate ligand, and a compound having a heterocyclic skeleton containing ≥2 heteroatoms is contained in the organic layer containing the metal complex and/or in other organic layer(s).

IT 864541-08-2

RL: DEV (Device component use); USES (Uses)
(organic electroluminescent devices employing heterocyclic compds. and
metal complexes with multidentate ligands)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediy1-kN)(3,5-difluoro-2,1-phenylene-kC)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 81 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:446045 CAPLUS

DOCUMENT NUMBER: 144:442422

TITLE: Organic electroluminescent devices using metal

complexes with multidentate ligands for enhancing

singlet exciton generation INVENTOR(S): Igarashi, Tatsuya

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 117 pp. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060099451	A1	20060511	US 2005-269809	20051109
JP 2006140182	A	20060601	JP 2004-326053	20041110
PRIORITY APPLN. INFO.:			JP 2004-326053 A	20041110
ASSIGNMENT HISTORY FOR	US PATEN	T AVAILABLE	IN LSUS DISPLAY FORMAT	
OTHER SOURCE(S):	MARPAT	144:442422		

AB Organic electroluminescent devices comprising ≥1 organic compound layer containing a luminescent layer between a pair of electrodes are described in which the luminescent layer contains an electrofluorescent compound, the emission when voltage is applied being mainly derived from the fluorescent compound, and the luminescent layer further comprises an amplifying agent functioning to increase the number of singlet excitons generated and thus amplifying the light intensity when voltage is applied, the amplifying agent being a metal complex having a tridentate or higher dentate ligand.

IT 808111-97-9 864541-08-2 RL: DEV (Device component use); USES (Uses)

(organic electroluminescent devices using metal complexes with multidentate ligands for enhancing singlet exciton generation)
RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1-phenylene-κC]]-, (SP-4-2)- (CA INDEX NAME)

10/578,039

Me Me

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediy1-κN)(3,5-difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 82 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2006:322757 CAPLUS

DOCUMENT NUMBER: 144:380339

TITLE: Organic electroluminescent devices

INVENTOR(S): Yamazaki, Kazuki; Mishima, Masayuki PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 109 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 2006093197	A	20060406	JP 2004-273203		20040921
JP 2010267974	A	20101125	JP 2010-126827		20100602
PRIORITY APPLN. INFO.:			JP 2004-273203	A3	20040921
OTHER SOURCE(S):	MARPAT	144:380339			

GΙ

SOURCE:

10/578.039

$$\begin{bmatrix} Q^{H1} & X^{H1}_{H1} & & & \\ Q^{H1} & X^{H1}_{H1} & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\$$

AΒ The devices contain light-emitting materials and host materials in the electroluminescent layers between a pair of electrodes. The light-emitting materials are metal complexes which have ≥3-position ligands, and the host materials are also metal complexes (I).

IT 808111-97-9 864541-08-2

RL: DEV (Device component use); USES (Uses) (light-emitting material; organic electroluminescent devices containing

metal

complexes and host materials in light-emitting materials) 808111-97-9 CAPLUS RN

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)-2,1phenylene-kC]]-, (SP-4-2)- (CA INDEX NAME)

864541-08-2 CAPLUS RN

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)(3,5difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

ACCESSION NUMBER: 2006:319697 CAPLUS

DOCUMENT NUMBER: 144:378696

TITLE: Light-emitting device employing a platinum complex with a quadridentate nitrogen-containing heterocyclic

ligand

INVENTOR(S): Ise, Toshihiro; Sano, Satoshi; Igarashi, Tatsuya
PATENT ASSIGNEE(S): Fuji Photo Film Cor, Ltd., Japan; Fujifilm Corporation
SOURCE: U.S. Pat. Appl. Publ., 44 pp.

CODEN: USXXCO

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

E	PATEN	IT NO.		K	IND	DATE	AP	PLICA	TION NO.			DATE
-				-								
Ţ	JS 20	06007335	9		A1	20060406	US	2005	-234141			20050926
Ţ	JS 77	32606			B2	20100608						
Ċ	JP 20	06093542			A	20060406	JP	2004	-279153			20040927
ن	JP 45	31509			B2	20100825						
Ţ	JS 20	09030949	0		A1	20091217	US	2009	-395542			20090227
	JP 20	10161368			A	20100722	JP	2010	-2388			20100107
PRIOR	ITY A	APPLN. IN	FO.:				JP	2004	-279153	A		20040927
							US	2005	-234141	A	3	20050926
ASSIGN	MENT	HISTORY	FOR	US	PATENT	AVAILABLE	IN	LSUS	DISPLAY	FORMAT		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMA OTHER SOURCE(S): MARPAT 144:378696

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- AB Organic electroluminescent devices are described which comprise a pair of electrodes and at least one organic layer including a light-emitting layer interposed between the pair of electrodes, wherein the organic layer contains at least one platinum complex compound having a quadridentate ligand containing a partial structure represented by formula (1), where 21 represents a nitrogen-containing heterocycle coordinated to the platinum through a nitrogen atom; 11 represents a single bond or a linking group; R1, R3 and R4 each independently represent a hydrogen atom or a substituent; and R2 represents a substituent.
- IT 881887-26-9P

RL: DEV (Device component use); MOA (Modifier or additive use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses) (light-emitting device employing platinum complex with quadridentate

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(4-cyano-2,1-phenylene-κCl)]]-, (SP-4-2)- (CA INDEX NAME)

nitrogen-containing heterocyclic ligand)

IT 881887-27-0P 881887-28-1P 881887-29-2P
RL: SPN (Synthetic preparation); PREP (Preparation)

(light-emitting device employing platinum complex with quadridentate

nitrogen-containing heterocyclic ligand)

RN 881887-27-0 CAPLUS

CN Platinum, [[2,2'-(1-methylethylidene)bis[6-(3-nitrophenyl)pyridinato]](2)]- (9CI) (CA INDEX NAME)

RN 881887-28-1 CAPLUS

CN Platinum, [[2,2'-(1-methylethylidene)bis[6-[3-(trifluoromethyl)phenyl]pyridinato]](2-)]- (9CI) (CA INDEX NAME)

RN 881887-29-2 CAPLUS

CN Platinum, [[2,2'-(1-methylethylidene)bis[6-(3-fluorophenyl)pyridinato]](2-)]- (9CI) (CA INDEX NAME)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 84 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2006:298895 CAPLUS

ACCESSION NUMBER: 2006:29889 DOCUMENT NUMBER: 144:340470

TITLE: Organic electroluminescent devices with multiple

emitter-doped active layers including complexes with tridentate and polydentate ligands

INVENTOR(S): Kitamura, Yoshitaka; Mishima, Masayuki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: U.S. Pat. Appl. Publ., 50 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060068222	A1	20060330	US 2005-234273	20050926
JP 2006121032	A	20060511	JP 2005-83458	20050323
PRIORITY APPLN. INFO.:			JP 2004-279563 A	20040927
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 144:340470

AB Organic electroluminescent devices having an anode, a cathode, and ≥1 organic compound layer between the anode and the cathode, with ≥1 of the ≥1 organic compound layers being an organic luminescent layer, are described in which the organic luminescent layer contains ≥1 host material and ≥2 luminescent materials, ≥1 of the luminescent materials being a metal complex having a tridentate or higher polydentate chain liqand.

808111-97-9 864541-08-2

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(organic electroluminescent devices with multiple emitter-doped active layers including complexes with tridentate and polydentate ligands)

RN 808111-97-9 CAPLUS

N Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)-2,1-phenylene-κC]]-, (SP-4-2)- (CA INDEX NAME)

10/578.039

Me Me

RN

864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-kN)(3,5difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

ANSWER 85 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

2

ACCESSION NUMBER: 2006:97819 CAPLUS

DOCUMENT NUMBER: 144:180483

TITLE: Organic electroluminescence device

INVENTOR(S): Ise, Toshihiro; Igarashi, Tatsuya Fuji Photo Film Co., Ltd., Japan; Fujifilm Corporation PATENT ASSIGNEE(S):

SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006032758	A	20060202	JP 2004-211236	20040720
JP 4484611	B2	20100616		

PRIORITY APPLN. INFO .:

JP 2004-211236 20040720 The invention refers to an organic electroluminescence device comprising a metal complex containing a metal from the 5 period or 6 period, and from the 5th to 11th Group, or a rare earth metal complex.

874743-10-9

RL: DEV (Device component use); USES (Uses)

(organic electroluminescence device comprising metal complex) 874743-10-9 CAPLUS RN

Platinum, (7,7,18,18-tetramethv1-23,24-CMdiazapentacyclo[17.3.1.12,6.18,12.113,17]hexacosa-1(23), 2, 4, 6(26), 8, 10, 12(25), 13, 15, 17(24), 19, 21-dodecaene-25, 26-diylκC25, κC26, κN23, κN24)-, (SP-4-2)- (9CI) (CA INDEX NAME)



Me Me

ANSWER 86 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:1004221 CAPLUS

DOCUMENT NUMBER: 143:315141

TITLE: Organic light-emitting devices with light-emitting layers containing an electrically inactive compound

Mishima, Masayuki; Ogasawara, Jun INVENTOR(S):

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan; Fujifilm Corporation

SOURCE: U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE			
				-				
US 20050202278	A1	20050915	US 2005-66195		20050225			
US 7422800	B2	20080909						
JP 2005294250	A	20051020	JP 2005-21268		20050128			
JP 4352008	B2	20091028						
PRIORITY APPLN. INFO.:			JP 2004-66781	Α	20040310			
			JP 2005-21268	A	20050128			

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

MARPAT 143:315141 OTHER SOURCE(S):

AB Organic electroluminescent devices which comprise an organic compound layer structure containing ≥1 light-emitting laver are described in which the light-emitting layer contains a light-emitting material and an elec. inactive organic compound capable of being subjected to dry film formation and having an energy difference between its HOMO and LUMO of ≥4.0 eV.

The light-emitting layer may comprise a phosphorescent material, especially an orthometalated metal complex or a porphyrin metal complex.

864541-08-2

RL: DEV (Device component use); MOA (Modifier or additive use); USES

(organic electroluminescent devices with light-emitting layers containing an

elec. inactive compound)

864541-08-2 CAPLUS RN

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-κN)(3,5-CN difluoro-2,1-phenylene-kC)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT:

THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS 1.3 RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 87 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

2005:1004220 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 143:315140

TITLE: Organic light-emitting device with hole transport layers containing an electrically inactive compound

INVENTOR(S): Mishima, Masayuki; Ogasawara, Jun

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan; Fujifilm Corporation

SOURCE: U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
				-		
US 20050202277	A1	20050915	US 2005-65478		20050225	
US 7422799	B2	20080909				
JP 2005294249	A	20051020	JP 2005-21267		20050128	
RIORITY APPLN. INFO.:			JP 2004-66777	Α	20040310	
			JP 2005-21267	A	20050128	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT MARPAT 143:315140

OTHER SOURCE(S):

PR

AB Organic electroluminescent devices which comprise an organic compound layer containing

a hole transport layer, a light-emitting layer, and an electron transport

layer between a pair of electrodes are described in which the hole transport layer contains a hole-transporting material and an elec.

inactive organic compound capable of being subjected to dry film formation and

having an energy difference between its HOMO and LUMO of ≥4.0 eV. The light-emitting layer may comprise a phosphorescent material, especially an

orthometalated metal complex or a porphyrin metal complex. The hole

transport layer may have a multilayered structure comprising a first hole transport layer comprising a first hole-transporting material; and a

CN

second hole transport layer comprising a second hole-transporting material and the elec. inactive organic compound

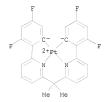
864541-08-2

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(organic electroluminescent devices with hole transport layers containing an elec. inactive organic compound)

RN 864541-08-2 CAPLUS

> Platinum, ((1-methylethylidene)bis((6,2-pyridinediyl-κN)(3,5difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 88 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:1004219 CAPLUS

DOCUMENT NUMBER: 143:315139

TITLE: Organic light emitting devices using electrically

inactive materials

INVENTOR(S): Mishima, Masayuki; Ogasawara, Jun

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan; Fujifilm Corporation

SOURCE: U.S. Pat. Appl. Publ., 22 pp. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PF

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050202276	A1	20050915	US 2005-65440	20050225
US 7635946	B2	20091222		
JP 2005294248	A	20051020	JP 2005-21266	20050128
RIORITY APPLN. INFO.:			JP 2004-66779 A	20040310
			JP 2005-21266 A	20050128

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 143:315139

Organic electroluminescent devices which comprise an organic compound layer containing

a hole transport layer, a light-emitting layer, a blocking layer, and an electron transport layer between a pair of electrodes are described in which the blocking layer contains an electron transport material and an elec. inactive organic compound capable of being subjected to dry film formation and having an energy difference between its HOMO and LUMO of

 ${\geq}4.0$ eV. The light-emitting layer may comprise a phosphorescent material, especially an orthometalated metal complex or a porphyrin metal complex or

IT 864541-08-2

RL: DEV (Device component use); MOA (Modifier or additive use); USES

(organic electroluminescent devices with blocking layers containing an electron transport material and an elec. inactive organic compound)

RN 864541-08-2 CAPLUS CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl-KN)(3,5-difluoro-2,1-phenylene-KC)]]-, (SP-4-2)- (CA INDEX NAME)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 89 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:409536 CAPLUS DOCUMENT NUMBER: 142:447304

TITLE: Preparation of cyclometalated metal complexes with

bipodal ligands

INVENTOR(S): Stoessel, Philipp; Gerhard, Anja

PATENT ASSIGNEE(S): Covion Organic Semiconductors G.m.b.H., Germany

SOURCE: PCT Int. Appl., 53 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 2005042550	A1 20050512	WO 2004-EP11890	20041021			
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW, BY,	BZ, CA, CH,			
CN, CO, CR,	CU, CZ, DE, DK,	DM, DZ, EC, EE, EG, ES,	FI, GB, GD,			
GE, GH, GM,	HR, HU, ID, IL,	IN, IS, JP, KE, KG, KP,	KR, KZ, LC,			
LK, LR, LS,	LT, LU, LV, MA,	MD, MG, MK, MN, MW, MX,	MZ, NA, NI,			
NO, NZ, OM,	PG, PH, PL, PT,	RO, RU, SC, SD, SE, SG,	SK, SL, SY,			
TJ, TM, TN,	TR, TT, TZ, UA,	UG, US, UZ, VC, VN, YU,	ZA, ZM, ZW			
RW: BW, GH, GM,	KE, LS, MW, MZ,	NA, SD, SL, SZ, TZ, UG,	ZM, ZW, AM,			
AZ, BY, KG,	KZ, MD, RU, TJ,	TM, AT, BE, BG, CH, CY,	CZ, DE, DK,			
EE, ES, FI,	FR, GB, GR, HU,	IE, IT, LU, MC, NL, PL,	PT, RO, SE,			
SI, SK, TR,	BF, BJ, CF, CG,	CI, CM, GA, GN, GQ, GW,	ML, MR, NE,			
SN, TD, TG						
DE 10350722	A1 20050525	DE 2003-10350722	20031030			

EP	167	8190			A1		2006	0712	1	EP :	2004-	7906	97		2	0041	021
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	, HU,	PL,	SK				
CN	189	4269			A		2007	0110		CN :	2004-	8003	1488		2	0041	021
JP	200	75196	14		T		2007	0719		JP 2	2006-	5371	37		2	0041	021
KR	200	61114	56		A		2006	1027	1	KR 2	2006-	7008	085		2	0060	426
US	200	70082	284		A1		2007	0412	1	US 3	2006-	5780	39		2	0060	501
RIORIT:	Y AP	PLN.	INFO	. :						DE 2	2003-	1035	0722	Z	A 2	0031	030
									1	NO 2	2004-1	EP11	890	V	v 2	0041	021

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 142:447304; MARPAT 142:447304



- AΒ The invention relates to novel metal complexes with bipolar ligands. Thus, cyclometalation reaction of 1,1-bis(6-phenyl-2-pyridyl)-1fluoroethane (preparation given) with cis-dimethyldi(n1-Sdimethylsulfoxidyl)platinum(II) in PhMe at 90° for 3h gave 94% title complex I. Such compds. are of application as functional materials in a range of different applications, associated with the widest sense of the electronic industry. 851231-11-3P
 - RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of cyclometalated metal complexes with bipodal ligands useful in electronic industry)
- RN 851231-11-3 CAPLUS
- CN Platinum, [(1-fluoroethylidene)bis[(6,2-pyridinediyl-kN)-2,1phenylene-KC]]-, (SP-4-2)- (9CI) (CA INDEX NAME)



(9 CITINGS)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 90 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:409442 CAPLUS

DOCUMENT NUMBER: 142:472295

TITLE: Platinum complex as luminescent material in organic

electroluminescent devices

INVENTOR(S): Itoh, Hisanori; Nakayama, Yuji; Iwata, Takeshi;

Matsushima, Yoshimasa; Hori, Yoji

KIND DATE

Patent

PATENT ASSIGNEE(S): Takasago International Corporation, Japan

SOURCE: PCT Int. Appl., 91 pp. CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: PATENT NO.

GI

PATENT NO.					KIND DATE					ICAI.	DATE								
						A2		2005	0512					20041027					
		2005																	
											BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
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			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
			TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
		RW:										SL,							
												BE,							
												LU,							
						BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	
				TD,	TG														
	ΕP	1683										2004-							
		R:										IT,			ΝL,	SE,	MC,	PT,	
				SI,	FI,							HU,							
		1875				A					CN 2004-80031799						0041	027	
		1004				C		2008											
		4110				B2		2008				2005-					0041		
		3165						2009				2004-							
		2006				A		2006				006-							
		2007		060		A1		2007			US 2	2006-	5/82	3 /		2	0060	503	
		7442		TNEO		BZ		2008	1028		TD 0		2740	c 1			0021	104	
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APPLICATION NO.

DATE

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 142:472295



AB The invention relates to a novel platinum complex useful as a material for luminescent devices satisfactory in luminescent properties and luminescent efficiency; and a novel luminescent material utilizable in various fields. The platinum complex is represented by the general formula I, where any two of rings A, B, C, and D each represents an optionally substituted nitrogenous heterocycle and the remaining two each represents an optionally substituted aryl or heteroaryl ring, provided that rings A and B, rings A and C, or/and rings B and D may form a fused ring; any two of X1, X2, X3, and X4 each represents a nitrogen atom coordinating to the platinum atom and the remaining two each represents carbon or nitrogen; Q1, Q2, and Q3 each represents a bond, oxygen, sulfur, or a divalent group; and any two of Z1, Z2, Z3, and Z4 each represents a coordinate bond and the remaining two each represents a covalent bond, oxygen, or sulfur. The invention also relates to a luminescent device employing this platinum complex.

IT 851605-11-3P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (platinum complex as luminescent material in organic electroluminescent devices)

RN 851605-11-3 CAPLUS

CN Platinum, [carbonylbis[(6,2-pyridinediyl-κN)-2,1-phenyleneκC]]-, (SP-4-2)- (9CI) (CA INDEX NAME)



OS.CITING REF COUNT:

9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 91 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2004:1080997 CAPLUS DOCUMENT NUMBER: 142:65002

TITLE: Organic electroluminescent devices and metal complex

compounds

INVENTOR(S): Nii, Kazumi; Watanabe, Kousuke; Igarashi, Tatsuya; Ichijima, Seiji; Ise, Toshihiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

PCT Int. Appl., 142 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	PATENT NO.																
	WO 2004108857																
110											BG,						
											EC.						
											, JP,						
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	BM.										, SL,						
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			TD,		,								- ~ .				,
JP	2005	3107	33		A		2005	1104		JP	2004-	1628	49		2	0040	601
	4460																
EP	1629										2004-						
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,									, HU,						
	1777				A					CN	2004-	8001	0948		2	0040	601
	1005		4		С												
CN	1016	6762	6		A		2010	0310		CN	2009-	1016	8315		2	0040	601
		0182	992		A1		2006	0817		US	2005-	5516	53		2	0050	929
US	7569	692			B2		2009	0804									
US	2009	0174	324		A1		2009	0709		US	2009- 2009- 2009-	3953	58		2	0090	227
JP	2010	0625	77		A		2010	0318		JP	2009- 2009-	2457	69		2	0091	026
JP	2010	0809	82		A		2010	0408		JP	2009-	2935	67		2	0091	224
JP	2010	TIRP	/ U		A		2010	0527		JP	2009-	2935	66			0031	224
PRIORIT	Y APP	LN.	INFO	. :							2003-						
											2004-					0040	
											2004-					0040	
										JP	2004-	1628	49		A3 2	0040	
										WO	2004-	JP78	82		W 2	0040	
											2005-					0050	929

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 142:65002

Organic electroluminescent devices which have a pair of electrodes and ≥1 organic layer including a luminescent layer between the pair of electrodes are described in which ≥1 layer between the pair of electrodes comprises ≥1 metal complex having a tridentate- or higher polydentate-chain structure ligand. Preferably, the metal ion in the metal complex is selected from platinum, iridium, rhenium, palladium, rhodium, ruthenium and copper ions. Selected groups of platinum complexes are also described.

808111-97-9

RL: DEV (Device component use); MOA (Modifier or additive use); USES

(organic electroluminescent devices using metal-polydentate liqand

```
complexes)
     808111-97-9 CAPLUS
RN
CN
   Platinum, [(1-methylethylidene)bis[(6,2-pyridinediy1-κN)-2,1-
     phenylene-κC]]-, (SP-4-2)- (CA INDEX NAME)
     2+Pt
     N
     Me
         Me
OS.CITING REF COUNT:
                         12
                               THERE ARE 12 CAPLUS RECORDS THAT CITE THIS
                               RECORD (20 CITINGS)
REFERENCE COUNT:
                         19
                               THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT
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L2
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L3
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L4
              9 S L3
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L5
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L6
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L7
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L8
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Structure attributes must be viewed using STN Express query preparation.

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